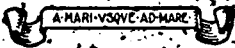


Dhananjayrao Gadgil Library



GIPE-PUNE-050999

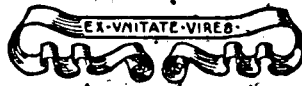
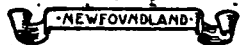
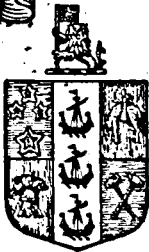


THE
BRITISH EMPIRE

A Survey in 12 Volumes—each self-contained.

Edited by

HUGH GUNN





INTRODUCTION TO THE SERIES

A WORD is necessary as to the origin and object of this series. The Management of the British Empire Exhibition (1924), in the early days of its organisation, approached the Imperial Studies Committee of the Royal Colonial Institute for advice and assistance in connection with the educational aspect of the Exhibition's work. The Editor of this series, who is a member of that Committee, happened during a period of enforced leisure to be spending a good deal of his time at the Institute, chiefly in its delightful Library. On its shelves he found entrancing reminiscences or records of men who went forth from these islands as Pioneers to brave the perils of uncharted seas and the dangers of unknown lands, inspired more by the spirit of adventure inherent in the race than by any calculated design for personal gain or lust for the acquisition of new territories. From these volumes could be traced the beginnings and gradual growth of remote colonies, through the early stages of awakening public interest, followed perchance by apathy or neglect until the advent of some world movement brought them into the fierce light of economic and international importance.

Though there lay upon the shelves an immense mass of valuable literature on almost every phase of Imperial work, it became apparent to the Editor that there was no series of volumes which gave a complete survey of the history, resources, and activities of the Empire looked at as a whole. He felt that there was need for a

series which would provide the ordinary reader with a bird's-eye view, so to speak, of these manifold activities.

The time seemed appropriate for such a survey. The Empire had emerged victorious from the greatest of wars. The Dominions which had contributed so magnificently to the victory had sprung, as it were, at a bound not only into the consciousness and acknowledged status of full and equal nationhood with the Mother Country, but also into definite recognition by Foreign Powers as great and growing World-Forces.

The decision to hold in London an Exhibition in which the vast material resources and industries of the Empire would be brought vividly before the public seemed also to demand that there should be a record and survey of the growth and development of this far-flung congeries of countries and peoples that are called the British Commonwealth of Nations.

The Editor accordingly consulted some of his friends, and was fortunate in securing their assistance and advice. The Management of the British Empire Exhibition welcomed the scheme as supplementing from the intellectual side what the Exhibition was doing from the material aspect. He has also been fortunate in obtaining the co-operation, as authors, of distinguished men, many of whom have played a foremost part in the public life or administration of the territories concerned, and all of whom have had wide personal knowledge and experience of the subjects which they treat. The Editor's thanks are especially due to these authors. They have undertaken the work from a sense of duty and from a desire to provide, at an important stage in our history, authoritative information regarding the great heritage that has been bequeathed to us, not only unscathed

Introduction to the Series v

but strengthened by the stern struggle through which it has passed.

Each volume is self-contained and deals with a special aspect of the Empire treated as a whole. The volumes are, however, co-ordinated as far as possible, and give, it is hoped, a comprehensive survey of the Empire.

The writers have had complete freedom as regards the statement of their views, and it is to be understood that neither the Editor nor his advisers are responsible for such individual expressions of opinion.

The late Sir George Parkin was deeply interested in the scheme, and, but for his lamented death, would have contributed a volume to the series.

The Editor, in conclusion, desires to express his thanks to Lord Morris, and to Sir Charles Lucas, especially the latter, for the benefit of their advice and ripe experience.

HUGH GUNN,
General Editor.

LONDON, *April, 1924.*

General Editor :

HUGH GUNN, M.A.

Late Director of Education and Member of the Legislative Council of the Orange River Colony ;
Organiser of Grey University College, South Africa, and of the University of Western Australia, etc.

Advisory Committee :

SIR CHARLES P. LUCAS, K.C.B., K.C.M.G. (Chairman).

Late Head of the Dominions Department, Colonial Office, Author of *An Historical Geography of the British Colonies*, *History of Canada*, *The Empire at War*, etc.

THE RIGHT HONOURABLE LORD MORRIS, K.C.M.G., LL.D.

Late Prime Minister of Newfoundland ; Member of the Imperial War Cabinet, etc.

SIR HARRY WILSON, K.C.M.G., K.B.E.

Late Colonial Secretary and Acting Lieutenant-Governor of the Orange River Colony ; late Secretary of the Royal Colonial Institute, etc.

ARTHUR PERCIVAL NEWTON, M.A., D.Litt., B.Sc., F.S.A.

Rhodes Professor of Imperial History in the University of London, etc.

THE LATE SIR GEORGE R. PARKIN, K.C.M.G., LL.D.

Late Secretary of the Rhodes Trust, who gave valuable assistance until his death.

I. THE DOMINIONS AND DEPENDENCIES OF THE EMPIRE

- Foreword H.R.H. the Duke of Connaught.
1. Newfoundland Rt. Hon. Lord Morris.
2. Canada Rt. Hon. Sir George Foster.
3. Australia Rt. Hon. Sir Joseph Cook.
4. New Zealand Sir James Allen.
5. South Africa Sir Edgar Walton.
6. India The Rt. Hon. Lord Meston.
7. Rhodesia Sir Lawrence Wallace and
Lt.-Col. E. Marshall Hole.
8. Tropical Africa Rt. Hon. Sir Frederick Lugard
and J. C. Maxwell.
9. West Indies The Rt. Hon. Lord Olivier.
10. Ceylon and Mauritius Sir Montagu Burrows.
11. Malaya Sir Ernest Birch.
12. Pacific Possessions Sir Everard im Thurn.
13. Sea Power and Outposts of the Empire
Commander H. T. Dorling.
With Foreword by the Rt. Hon. L. S. Amery.

II. THE STORY OF THE EMPIRE Sir Charles Lucas.

**III. THE CONSTITUTION, ADMINISTRATION, AND LAWS
OF THE EMPIRE** Prof. A. Berriedale Keith.

**IV. THE RESOURCES OF THE EMPIRE AND THEIR
DEVELOPMENT** Evans Lewin.

**V. HEALTH PROBLEMS OF THE EMPIRE—PAST,
PRESENT, AND FUTURE**
Dr. Andrew Balfour and Dr. H. H. Scott.

VI. THE PRESS AND COMMUNICATIONS OF THE EMPIRE
J. Saxon Mills.

**VII. THE TRADE, COMMERCE, AND SHIPPING OF THE
EMPIRE**
Sir Charles McLeod and Prof. A. W. Kirkaldy.

VIII. MAKERS OF THE EMPIRE Hugh Gunn.

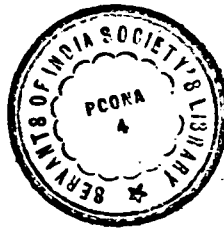
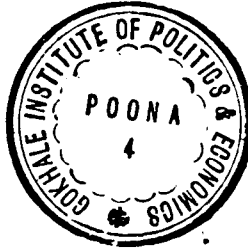
IX. THE NATIVE RACES OF THE EMPIRE
Sir Godfrey Lagden.

**X. THE UNIVERSITIES AND EDUCATIONAL SYSTEMS
OF THE EMPIRE** Prof. Arthur Percival Newton.

XI. THE LITERATURE AND ART OF THE EMPIRE
Edward Salmon and Major A. A. Longden.

XII. MIGRATION WITHIN THE EMPIRE
Major E. A. Belcher.

THE TRADE, COMMERCE, AND
SHIPPING OF THE EMPIRE



THE TRADE, COMMERCE AND SHIPPING OF THE EMPIRE

by

SIR CHARLES CAMPBELL McLEOD

East India Merchant.

Member of the Port of London Authority and of the Board of
Directors of the British Empire Exhibition (1924), Chairman
of the Council of the Royal Colonial Institute, etc.

AND

ADAM W. KIRKALDY, M.A., B.Litt. (Oxon.)

Dean of the Faculty of Economics, University College, Nottingham.

With Map and Appendices

“When Love unites, wide space divides in vain,
And hands may clasp across the spreading main.”



LONDON: 48 PALL MALL

W. COLLINS SONS & CO. LTD.

GLASGOW MELBOURNE AUCKLAND

X5.1-3
F4

Copyright, 1924

50999

Manufactured in Great Britain.

INTRODUCTION

BY SIR CHARLES MCLEOD

Most people will agree that much of the unrest in the commercial and industrial spheres, from which this country is now suffering is due to ignorance of the factors which have contributed to our success in the past and of the precise character of our national activities in matters of Trade—I much doubt whether the majority of those of our fellow-countrymen who talk so glibly about “nationalisation” and the need for relegating the capitalist to the limbo of oblivion, have ever studied with open and intelligent mind the history of the growth of England as a trading power, the intricacies of her commercial and fiduciary undertakings, and the unusual difficulties and problems which now confront her as the aftermath of the devastating cataclysm of the Great War. I feel convinced that if ignorance of these vital subjects were less widespread and profound, the problem of our post-war recuperation would be far easier of solution, and that if only the average man in the street or the average worker were able to think imperially, or in other words to regard his own particular difficulty or grievance as the necessary and indivisible concomitant of the larger disabilities now affecting England and the British Empire, we should witness, not only less domestic ill-feeling and recrimination, but also a dead-lift effort on the part of all classes, acting in concert, to restore the country to the position which she occupied before the fateful August of 1914.

It is in that belief that I commend most strongly to all those who are really anxious to learn something

of our Imperial liabilities and commerce the following chapters. For herein is provided a succinct prologue, giving the history of the opening of the great trade-routes across the world, from the dim days, when the Phœnician trader carried his civilising influence from the Mediterranean to our own shores, down to the age of Cook's great adventure; and this is followed by a lucid account of the development of ocean-transport, and the evolution of the sailing-ship and the steam-ship. Equally interesting and equally necessary to a full understanding of our Imperial position is the chapter on the effects of science, invention, and initiative on commercial developments and methods. "The pen is said to be mightier than the sword. It would be even more correct to suggest that invention and scientific research carried on quietly in the laboratory and the study, have frequently done more for human progress in the real sense of the word than the excited action of the politician or even the strenuous exertion of the soldier. Nowhere can this be so clearly seen as in the sphere of ocean voyaging." And thus we are invited to consider the fascinating tale of the Sextant, the Chronometer, and the Compass, without which scientific navigation could never have been evolved. We must perforce pay a tribute of admiration to those old sea-captains, Vasco da Gama, Columbus, Cabral, Sir R. Chancellor, and others, who boldly put to sea, without these modern aids and inventions, "trusting," as Columbus did, "to find new worlds by steering due west." For they, through their own practical experience, collected an ever-increasing sum of knowledge regarding sea and weather conditions, which was of the utmost value to their successors, and enabled the scientists at home, like Hadley and Dalton, to establish the theory of trade-winds and other physical phenomena. It behoves us

also, with our close political and commercial associations with the East, to remember that it was an Arab sailor—a scion of the race which was carrying on a brisk sea-trade across the Indian ocean long before the first Phœnician sailed up the Mediterranean—who, persuading da Gama to let his ships drive before the *mausim* or monsoon, showed him the road to Calicut in 1498. The world, and we in particular, owe not a little to that Arab seaman.

The perfecting of the science of meteorology and the invention of instruments for navigation led to the discovery of new seas and so to the opening of new markets, and these in turn produced that extraordinary class of merchant-captains, who combined a thorough knowledge of navigation with a sound business instinct. We, who make constant use of the submarine cable, the telegraph, and wireless installations, and are in close and almost hourly touch with markets all over the world, can with difficulty realise the position of our forefathers, who frequently had to make shipments to unknown markets, as the only method of initiating trade relations, who had to wait several months before they could receive, and reply to, letters from remote countries like India and Australia, and who were never really certain of the success of their venture, until their merchant-captains at length cast anchor again in an English port. These conditions necessarily introduced into trade and business a large element of speculation; and not the least of the benefits which we now enjoy from the application of science to our commercial undertakings is the reduction of the gambling element which was once inseparable from overseas trading. "Whilst fifty or sixty years ago, it was almost impossible to carry on an overseas business without undertaking considerable risks, to-day speculation has become the mark of the parasite in business

. . . To-day the shipowner not only watches the markets in which he is interested for freight purposes, but, thanks to wireless, he is in direct and practically in complete control of his ships in any part of the world. The captain is merely a navigator—the business of the ship is controlled from headquarters. The business of a captain is to navigate his ship safely from port to port, and carry out instructions. The whole machinery connected with the collection and distribution of cargoes in foreign and distant ports is controlled from the centre of operations.

The extent to which scientific investigation can be made to subserve the needs of commerce is amply shown in the comparatively recent history of the construction of the Panama Canal, the full effect of which upon world commerce and the interests of individual nations will not be apparent for some time. The first attempt to pierce the isthmus of Panama was made by the famous Frenchman, de Lesseps, whose great Suez Canal scheme broke down the natural barrier between Europe and the East and exercised a profound influence upon the progress of affairs in India. De Lesseps's victory at Suez was only equalled by his signal failure at Panama. He was beaten by a malaria-carrying mosquito, which caused the death of thousands of men employed. It was left to an Englishman, Ronald Ross, to discover the real cause of the scourge known as "Yellow Jack," and to the Americans, acting on his discovery, to take up the Frenchman's abandoned scheme, to annihilate the mosquito in the canal area, and to drive a great shipping passage through from the Atlantic to the Pacific. The opening of the Suez Canal in 1869, apart from its influence upon India in the political and social spheres, is justly cited as an example of the interdependence of shipping and banking. No sooner was the canal navigable than our shipowners

were faced with the problem of scrapping a large number of steamers, which had up to that date served the Eastern trade adequately and brought them good profits, and of providing fresh capital for the construction of a new class of steam-vessel suited to the passage of the canal. Credit and assistance from the money market were imperatively needed by any one who set about building the required new tonnage. While foreign shipowners were still pondering the problem, the English owners were able to scrap their obsolete ships and build new ones, by drawing on the large funds held by the English banks, whose long-established integrity and straight dealing prompts us to leave our spare cash in their custody. The practice followed by the average Englishman of entrusting a large amount of his surplus funds with his banker results in this country possessing a large and elastic money-market, capable of financing new trades and new experiments. This interdependence of trade and commerce now extends to every kind of industrial and commercial enterprise.

From the chapter on the "Effect of Industry on Commerce," one may pick out one or two subjects, historical, social, and economic, which deserve emphasis. It is clearly shown that England's position as the greatest industrial and manufacturing power in the world was primarily due to two great changes, one of which occurred about the middle and the other in the latter half of the eighteenth century. In the former period certain political events impressed upon the public mind the vital need of improving the internal communications of the country; and in consequence a vast network of solid roads, canals, and minor works was rapidly provided in place of the difficult and dilapidated tracks which formed the only means of communication in earlier years. This led directly to free movement of the population and

to the constant visits of factors and travellers in raw material to the towns and villages. Industry at that date was still worked on what is known as "the cottage industrial system," the artisan manufacturing in his native hamlet the raw material supplied to him from distant places. So long as communications were bad or non-existent, this village hand-industry was necessarily restricted; but the provision of the roads and canals above mentioned at once resulted in more continuous supplies of the raw material, and consequently in so rapid a development of manufacture that England soon assumed the position of the world's workshop.

This was followed by the great revolution of the second period based on the invention of the steam-engine and the application of steam-driven machinery to industry. The cottage-industry disappeared for ever, and the village-worker, bidding adieu to his hand-loom and the pure air of the countryside, hastened into the new industrial towns which sprang up with lightning rapidity. The feverish accumulation of wealth by unlimited production became the supreme desire of all: great centres of human industry grew haphazard around the engines and machinery which coined the new wealth; men sacrificed their own health and that of their women and children to the craze for money-making; and thus were sown the seeds of squalor, insanitation, and overcrowding, which still constitute one of our gravest social problems. This great change found its reflection even in Eastern lands. During the early years of the nineteenth century the bulk of the Indian export trade in cotton manufactures was absorbed by England, France, and Portugal, Persia, Arabia, and the Straits Settlements. After 1845 the United Kingdom ceased to import Indian hand-made cotton goods in any appreciable quantity, as, owing to the events referred

to above, she found it possible, not only to supply her own wants, but also to undersell the Indian manufacturer in his own markets. But by 1860 a radical revolution in the progress of trade was effected by the enterprise and acumen of certain Indian merchants of Gujarat and Bombay. They had watched the rich harvest gathered by Lancashire and determined to erect their own mills, spin their own yarn, and manufacture their own textile fabrics. The first Bombay cotton-mill was opened in 1854, the second in 1858, and a third in 1860. Thus was prepared the foundation of that controversy regarding the rights and claims of Lancashire and India, which for many years afterwards formed an important item in the programme of the Indian nationalist and politician, and has only recently lost something of its importance by the imposition of an additional duty on imports of English manufactured cotton-goods into India. Moreover, the evils attendant upon the movement of large bodies of workers from the villages to the new industrial centres of England had their exact counterpart in the capital of Western India. As the industry thrived and new mills were erected, there migrated into the restricted area of Bombay large armies of workers, almost entirely illiterate and lacking both physical and moral stamina, at a rate which defied all efforts to provide for their proper accommodation. In due time nature exacted grim retribution for this wholesale neglect of her laws. The terrible mortality which characterised the outbreak of plague in 1896 and the epidemic visitations of succeeding years, was aggravated by the grossly unhygienic conditions in which the Indian factory-operative was forced to live; and despite factory laws and municipal rules and regulations it will be many years before the evils introduced by the industrial progress of the latter half of the last century are reduced or eradicated.

We taught Western India the secret of the creation of wealth by means of modern industrial machinery and processes, but in so doing we brought her face to face with grave social and economic problems, which still await final and adequate solution.

Apart from the social aspect of the industrial revolution of the eighteenth century, it exercised a direct effect upon England's position as a world power. She was already the greatest colonising and maritime nation; she now became also the greatest manufacturing nation. The skill which the English factory-hand acquired in using the new machinery and new processes enabled her to find ready markets for her goods, and so eventually to acquire the wealth which was necessary to equip the armies that put an end to the Napoleonic menace. Nor let it be forgotten, especially in these days when gestures of international friendship are in danger of being rated more highly than practical steps to national safety, that it was the security afforded by the British Navy which left us free to nurse and develop our home trade and manufactures up to the point at which we far outstripped all rivals on the continent and elsewhere. "The Royal Navy of England," said Blackstone in his famous *Commentaries*, "hath ever been its greatest defence and ornament; it is its ancient and natural strength—the floating bulwark of our Island." These words and the story of our struggle with the gigantic figure of Napoleon should be remembered by every Englishman. The material benefit which thus accrued had its darker side, however. The aims of the majority of the population became grossly materialistic; men lost somewhat of the moral and ethical beliefs which had guided their forefathers; and the widespread desire for wealth and for commercial dominance, coupled with a misleading system of political economy, which underrated the importance of a contented,

well-fed, well-educated, and well-housed industrial population, gave rise to the suspicion and class jealousy which still clog our industrial progress. The sudden acquisition of great wealth seems invariably to bring serious evils in its train: in some places it has given rise to orgies of insane speculation, which ultimately ended in the widespread ruin of business houses and individuals: in England, during the early years of the nineteenth century, it shattered the amity and friendship between employer and the workman, and engendered the angry feeling which, despite remedial legislation, has so far defied conciliation. Another direct result of the industrial revolution was that England ceased to be self-supporting in the matter of her national food-supplies. As the population drifted from the villages into the great urban centres, agriculture languished, and its old position as a staple industry was usurped by manufactures. This, coupled with a continuous growth of population, rendered the home-supply of food increasingly inadequate, and drove our shipping over the high seas to seek the large quantities of raw material and food-stuffs required to maintain the population in food and work. This would hardly have been such a paying proposition as it proved to be, had England not possessed abundant reserves of coal, which were in steady demand among foreign nations and served as a lucrative outward freight for the vessels which brought back the food-supplies and raw material. The rationing of food, which we all remember in the latter portion of the war period (1914-18), may be regarded as an indirect legacy of the industrial revolution, and as a stern reminder that any misguided attempt to reduce our naval strength below the margin of safety must inflict intolerable hardships on the people of this island in the event of another international conflagration.

It was hardly likely that the great success secured by England in the spheres of industry and commerce should have passed unnoticed and unchallenged by other nations. Germany, America, Japan, and the Scandinavian countries naturally desired to follow our example and participate in the creation of wealth on the best terms, realising, as is pointed out at the end of Chapter V., that manufacturing industries under modern conditions are capable of producing on such a scale that the surpluses available for foreign trading purposes might well reach a hitherto incredible figure. Hence arose the brisk competition in shipping and world-markets, which was so marked a feature of the years immediately preceding the outbreak of war. Four years' devastating warfare has introduced many changes and temporarily dislocated the commercial progress of the great nations; but the struggle is merely suspended, not ended; and human wit and human energy will soon be seeking new worlds to conquer. The vast continent of Africa is as yet barely on the threshold of its full economic life; South America, a large part of North America, and huge tracts of Eastern Europe and Asia, to say nothing of Australasia, are all awaiting commercial and industrial development; there is an ample field, indeed, for the commercial and colonising capacities of the most progressive nations for many generations to come. Herein lies both a hope and a warning to England. She has led the vanguard of progress for many years; her business men, her merchants, her ship-owners, have acquired knowledge, experience, and an invaluable habit of vigilance, which will be sterling assets in the years of keen competition that are bound to come, as the scars of war gradually heal; she has a well-merited reputation for integrity and fair dealing, which will ensure her a welcome in new markets and undeveloped countries. We can look forward, indeed.

with equanimity to her advance in the commercial and industrial spheres, provided only that she will set her internal affairs in order and rid herself once and for all of the evil legacy of class jealousy and recrimination, inherited from a former generation, which hampers her enterprise, saps her industrial and commercial energy, dissipates her wealth, and would, if allowed to continue, eventually force her to take a lowlier position among the great civilising nations.

The reputation of the British for integrity and good faith in business matters is of particular value in the spheres of Finance and Exchange—subjects about which the average man in other walks of life knows very little. The machinery, which has gradually been evolved by the practice and experience of many years in connection with currency, banking, and the financing of commerce, is extraordinarily delicate and intricate; and those who would know something more of the system which, more than anything else, facilitates the trade and commerce of the Empire, cannot do better than read the exposition in Chapter V. of the origin of standard currencies, bills of exchange, and other contrivances for the financing of the nation's foreign trade. It is suggested tentatively that the furs of the wild animals trapped and killed by the hunter of early ages may have served as the earliest type of circulating medium or "money." It is a generally accepted fact that the trade of the ancient world prior to the sixth or seventh century B.C. was almost wholly a trade by barter, and it is equally certain that the ordinary standard of value among the early Aryans was cattle, as it is still among the Zulus and Kaffirs to-day. H. G. Wells has also noted that from time to time various other substances have been found convenient as a standard of value, such as tobacco, which was used in colonial days in North America. It is therefore hardly wise to

dogmatise on a point, which is of minor importance by comparison with the main argument. Again, in the interesting tale of how the Bill of Exchange originated in the persecution of the Jews during the Middle Ages, one is led to infer that such persecution was prompted solely by the Jew's special knowledge of finance and his amazing capacity for accumulating wealth. I write subject to correction by those who may have made a closer study of this subject, but I am inclined to the view that it was persecution which drove the Jew into finance and usury, and not his financial acumen which rendered him obnoxious. The bigoted minds of the Middle Ages saw in him the member of a race which had driven the Founder of Christianity to death, while his habits and appearance were a frequent reminder that he was an Oriental and an outcast. Every kind of disability was imposed upon him ; and he therefore resorted to the intricacies of finance as the only method left to him of earning a livelihood. To that line of business he has adhered ever since, and even a cursory glance at the leading names in British, French, and German financial circles will make it clear that he has lost nothing of his ancient and inherited capacity.

The history of Lloyd's Registry, from the early days of the famous coffee-house in Tower Street down to our own times, is likely to interest every man who is proud of the leading institutions of our Empire. For Lloyd's is an Imperial asset of world-wide significance, and, as pointed out, this Welsh surname has acquired such superlative importance in all the ports and on all the ocean highways that more than one foreign rival in the business of shipping has adopted it. It is a fascinating story, of which the main details are embodied in the comprehensive chronological table of important shipping dates, commencing with the framing of the Laws of Oléron in 1194, and

ending with the opening of the Imperial Conference in London in October, 1923. Here the reader has in outline the whole history of our Empire's progress in the field of world trade and commerce. It is a tale of high resolve and great achievement which should be known to all, both here at the centre of the Empire and in the Dominions and outposts beyond the seas.

The closing years of the nineteenth century were remarkable for the entry of other nations into the business of ocean-transport; and apart from the complications arising from this competition, which embraced every sea-route, British owners were confronted with the practical difficulties caused by the different systems of commercial law and commercial method and custom followed by their foreign rivals and competitors. The wise men of all countries quickly realised that mercantile progress could not proceed on orderly lines without the unification of commercial law and procedure and commercial instruments and practices, or, to quote the words of this book, that "the internationalisation of commerce is a necessary outcome of world-development." Hence arose the spectacle in the years preceding the outbreak of war, of international conferences, composed of the representatives of the principal trading nations, which discussed and registered conclusions on the vexed questions of commercial law, and practice. The war naturally put an end for the time being to these international meetings of experts, but their resumption is obviously necessary, if the world at large is to be supplied, as it wishes to be, with regularity of services, trade, prices, and employment. There is need for international conferences, not subject to the control of governments, but established and arranged for the purpose of passing regulations based on their knowledge and

experience by the men of all countries engaged in these important services. The business of the Government is to govern and not to trade. It is for them to see that these conferences carry on their work in no syndicalistic spirit, but with the interests of the community before them, as well as the interest of their members. It is well for the members of these conferences to bear in mind that their interests are best served by considering the interests of the community. What is wanted is a maximum of facility, in order that there may be a maximum of trade giving maxima profits, wages and salaries with minima rates, freights and fares. Where this is borne in mind, the community will develop satisfactorily, and will enjoy a high and increasing standard of comfort. The growing interdependence of all industries, and even of all individuals, is one of the marks of twentieth century civilisation. This is as true in shipping as in manufacturing, and it has to be recognised especially by the men who are responsible for organising world services. This matter of conferences on commercial law and practice is one direction in which the League of Nations can render inestimable services to mankind at large, and sufficient evidence exists to show that its potentialities in this respect have already been recognised and accepted. On purely political subjects, such as are ordinarily dealt with by the Foreign Offices of the nations, the League's powers are obviously restricted; but there seems to me to be no limit to the possible value of its work in the spheres of international finance, commerce, mercantile law, and trading customs. It really can simplify and co-ordinate; and the important fact that it is a body, perhaps the only international body in the world, with a predominantly moral standard, must add great potency and weight to its discussions, suggestions, and decisions.

The question of international competition in the economic and commercial spheres leads naturally to a consideration of the position destined to be occupied by the British Empire in the years to come. At this moment the British are responsible for the development and administration of no less than thirteen million square miles of the earth's land-surface, scattered throughout Asia, Africa, North America, and Australia; and this large Empire, containing some of the fairest spots on the globe and every variety of soil and climate, has grown for the most part fortuitously and without conscious design. Political adventure and sheer force of arms have had little or nothing to do with its establishment. On the contrary, as a recent writer has pointed out, "our Empire grew most rapidly when our Government cared and thought least about it, that is to say, in the seventeenth century, when we were pre-occupied with domestic disputes and a civil war, and during a period of about seventy years after the War of American Independence, when most thoughtful Englishmen regarded colonies as useless objects of expenditure, since they were all bound, sooner or later, to sever their connection with the mother country." The Empire, indeed, owes its development mainly to the gradual extension of their sphere of operations by British traders. The industrial revolution, already referred to, which made England the first manufacturing country in the world, obliged her to export, and this process demanded the occupation of convenient trading centres; the industrial distress which dogged the path of that Radical revolution in manufacturing processes introduced the habit of emigration; and these two factors, a huge export trade and emigration, unchecked by external conditions, naturally produced colonial expansion.

Yet it is doubtful whether these two powerful stimuli would have sufficed to establish our present Empire, had we not possessed certain qualities engendered by the often maligned climate of these islands "on the north-west confines of Europe." "The progressive peoples of the world are those who live under conditions which are neither too advantageous nor too niggardly, where, if the community or the individual will face the situation and put forth the necessary exertion, the conditions of life may be made not only tolerable, but even luxurious. Among the peoples living under these conditions, we, in these islands, occupy a prominent position. We grumble at our climate, but Nature has given us wonderful resources if we will take measures to utilise them. The climate, with all its seeming disagreeableness, is one of the best in the world for the development of a virile, progressive race." In brief, we have been dowered by the climate of these lands "of brown heath and shaggy wood, of the mountain and the flood" with a spirit of self-dependence and initiative, with a great capacity for hard work and continued effort, with a tenacity which has been tested in many a struggle against seemingly insuperable odds. Coupled with these innate qualities, which formed the secret of successful colonial expansion, there has grown up a deep sense of responsibility to others, which manifests itself in the British treatment of backward races, in the British encouragement of individual nationalities, and in the British belief in the principle of self-government. It is in these respects that we differ fundamentally from other nations, who have acquired sovereignty over foreign lands. It is unnecessary to seek examples in the Colonial Empires of vanished centuries, like that of the Portuguese in India, which was shattered by religious bigotry and intolerance and by imprudent inter-marriage with

the natives of the country. The story of the German Colonial Empire amply illustrates the difference between the policy and ideals of the British nation and one of their most formidable rivals. "The German dependencies," remarks Bulkeley in his *British Empire*, "would have been better for more colonists and fewer officials and soldiers; their country was over-administered; they governed systematically and scientifically, but showed little sympathy with their subjects, and no regard for native customs; they exacted forced labour, and denied that a black man had any rights." This is the reason why the brief story of Germany's colonial empire is filled with bloodshed and why native rebellions and their complement of drastic repression occurred in the Cameroons and in South-West Africa. The annihilation of the brave Hereros is a melancholy example of the evil attendant upon an unbridled lust for world power.

A cursory examination of the economic conditions of the British Empire justifies the dictum that, so far as the material life of its inhabitants is concerned, it could stand self-sufficient and alone. It is estimated that the total quantity of cereals, meat, and other food-stuffs produced by Canada, Australia, New Zealand, and India, would amply suffice to feed the whole population of the Empire. The crux of the problem is the regular and organised distribution of these supplies to those parts of the Empire, such as the United Kingdom, which do not produce sufficient food for their own population. England could produce a much larger supply of food-stuffs than she does at present; and a dead-lift effort to restore something of its former importance to agriculture, by educating a larger proportion of children in agricultural and rural pursuits, by bringing more land back into cultivation, and by a prudent system of storage, would perhaps serve to reduce the present abnormal price

of the loaf. Assuming, however, that English agriculture eventually recovers in some degree its lost importance, it will still be necessary to import food from overseas, and one of the most vital problems now awaiting solution is the continuous and calculated distribution of those imports. When we turn to raw materials, the same problem of distribution confronts us. As regards cotton, we still depend chiefly upon the surplus of the American crop, although large tracts of cotton soil lie within the Empire. The possibility that the American supply may diminish has already prompted us to survey our own resources and commence the development of Empire cotton-production; and provided that we can combine a largely increased cultivation with suitable transport arrangements between the cotton-tracts and the nearest seaports, we need entertain no fear of a shortage of this very important commodity. The same is the case with wool. Those who produce it are alive to our Imperial needs; all that is needed is the adequate distribution of our surplus. Take next the subject of timber. The Empire contains some of the finest forests in the world, capable under a scientific system of conservation and regeneration of supplying the needs of the whole British Commonwealth of Nations. In many places, and not least in England itself, there has been enormous waste of sylvan resources, and the total stands of fine timber have been most imprudently and recklessly reduced in size, to serve immediate needs. As a forest expert put it, we have been "mining" instead of "cropping" our timber supply. The folly of squandering our valuable resources has at length, however, begun to attract the attention of statesmen and others, and an active interest is being taken, particularly in Canada, in the subject of conservation and afforestation. It seems ridiculous that we should continue to depend upon America

and the Scandinavian countries, when every kind of hard and soft wood, suitable for every kind of purpose, is growing within Imperial limits. Once again the chief problem is concerned with transport and distribution.

The position as regards metals and fuel is somewhat different. In connection with both these materials there is much preliminary work to be accomplished by the scientist and expert investigator. While in England we have been rapidly using up our wealth in the better qualities of ores, we have made no serious effort until recently to discover what classes and quantity of metals the overseas dominions can provide. Our general carelessness in these matters is well illustrated by the case of Germany and the zinc-supply, set forth in these pages. It is incredible that we should ever again permit a foreign nation to exploit the mineral wealth of the Empire to our own detriment. Much the same shortcomings can be laid to our charge in the matter of fuel. The secret of our manufacturing and commercial success, and also of our mercantile supremacy on the sea, lies in a cheap and abundant supply of good coal. Yet we have used that supply in the most wasteful manner and at the same time find our position in the international fuel market seriously challenged by foreign competitors. What have we done towards determining the extent and quality of the Empire's fuel resources? What do we know of the possibilities of Imperial supplies of oil and gas? Little or nothing.

There are people who believe that the present importance of the famous British sea-routes via the Suez Canal and the Cape may before long be seriously challenged by the growing popularity of the route via the Panama Canal, and that the supply of fuel will be one of the determining factors in the rivalry of the British and American sea-routes. However that

may be, it is obvious that an investigation of the fuel resources of the Empire ought to be commenced without delay, and it is further suggested that simultaneously every British university should provide facilities for the training of experts, who will shoulder the task of investigation and development. We are now at the parting of the ways. If we are to retain our position as an Empire, we must lay aside the old careless idea of pre-war days that we shall always "muddle through somehow." We must discover at the earliest moment, by dint of careful investigation, which fuel areas of the Empire are of real economic and commercial importance, and then take the necessary measures to work them. "Our widely-scattered resources should enable us to maintain our position in world-commerce, and continue to supply us with that great advantage in the freight market, the possibility of sending fully loaded ships in all directions." The whole problem is of vital importance to England, which, owing to its rapid increase of population, has now to import two-thirds of its food-supply and enormous quantities of raw materials for the use of its mills and factories: and the paramount question of supply and distribution between the component countries of the Empire is likely to employ the genius of our scientists and experts, our controllers of shipping and commerce, and our leading business men for several years to come. The past achievements of the Anglo-Saxon persuade us that they will not fail.

The final chapter of the book is a contribution to the study of the difficulties of the present day. The average man in the street, the ordinary member of a trades union, is probably unable to understand the reason why on the one hand continued unemployment is a regular feature of modern industrial life, while on the other hand millions of his fellows are unable to obtain

the things they need, though the latter can be produced without difficulty. He notes that deliberate restriction of output is practised both by workers and employers—by the former in the belief that this process will prevent unemployment, by the latter from a fear of glutting the markets on which their prosperity depends. He is assured, perhaps, through the medium of the platform and the press that the equipment of the modern world is such as to guarantee an adequate supply of all the necessaries of life to every human being; and yet a cursory glance at conditions in his own country reveals intolerable pictures of misery and want. What is the reason? With the tradition of the early years of the industrial revolution in his mind, he is inclined to ascribe the whole evil to the selfishness of the employer and capitalist. Thereby he misses the real solution of the puzzle and merely serves to swell the ranks of the discontented and class-conscious. The truth is, that the development of the machinery of circulation and distribution has not proceeded *pari passu* with the growth of mechanical improvements. Hence arise a want of balance and an uncertainty as to demand, which directly engender unemployment and auxiliary evils. Further, this failure to perfect the means of distribution is aggravated by the world's industrial and trading groups, which seek to benefit themselves by erecting tariff-ramparts and protective-walls, thus blocking the free utilisation of modern methods of production, and also by the chaos of international currencies and exchanges, which is one of the most baneful legacies of four years' hostilities.

So far as concerns England and the Empire, the steps towards industrial stability and commercial well-being are clearly indicated. We have to learn now to use a great deal of new equipment established under conditions of war, and how to reorganise

conditions of employment in such a manner that the country will be furnished with "a contented labour force, working under proper conditions, realising the possibilities as well as the limitations of the industries in which they are engaged." Secondly, our shipping managers must face and solve the problem of low freights, or in other words the question of how to keep our ships running in all directions with full cargo space. The third requirement is the establishment of much closer contact between the producer and consumer, which involves the disappearance of the curse of modern markets—the irresponsible speculator. There is nothing more detrimental to world-interests and to our own Imperial interests than the modern spirit of gambling. "From day to day the condition of crops, the available stocks, the possibility of shortage in some markets or plethora in others, gives a fund of information which can be utilised for the purpose of securing greater regularity, and for lessening fluctuations and consequent inconveniences to all classes of the population. If only the operations of the markets could be restricted to genuine business, the position would be that, under world-trading conditions, the producer and consumer would be almost in as close contact as they were in the comparatively primitive times when only the local market existed." The desirability of ousting the gambling speculator from the world of trade cannot be gainsaid; but considering how deeply the spirit of gambling is implanted in a majority of mankind, it is not easy to determine how far this object can be achieved. I am rather inclined to hold that, in at any rate one of the countries with which I am well acquainted, that spirit will never be wholly eradicated, though I doubt not the possibility, in matters of trade and finance, of restricting it to narrower limits. Of international conferences in regard to shipping and commerce,

mention has already been made ; and this subject leads to the difficult question of the stabilisation of exchange. There can be no tranquillity in the trading world until a standard of currency has been established, which can be accepted universally. The gold standard, to which we have all become accustomed, has temporarily disappeared, and so far, nothing has been found to take its place. The prospect of a satisfactory solution of this fundamental problem is clouded by international jealousies ; and the striking suggestion is therefore made that the British Empire, regarded as a unit, should step into the breach and evolve a new standard of currency, backed by adequate security. I leave the reader to seek the main outlines of this bold scheme in the penultimate paragraph of this work, and need only remark that, should such a scheme be eventually framed and put into operation, it would afford a fresh and striking instance of the self-reliance and initiative of our race and of the part which we can play as arbitrators in world affairs.

Nor let us forget that the closer the bonds uniting the scattered countries of the British Empire, the stronger will be our position in international commerce and affairs. Let us set our own house in order, so far as we can, and, by establishing a freer circulation of commodities and population throughout the Empire, endeavour to put an end to the more glaring evils of our industrial system. Above all, let us strive to give every citizen of the Empire a better knowledge of Imperial history and Imperial problems : for such knowledge, when acquired and transmitted to succeeding generations, must prove a most potent factor in strengthening our Imperial unity and in preparing our children to shoulder the enormous responsibilities of their Imperial heritage.

In conclusion, I desire to state that the following

chapters have been written entirely by Professor Kirkaldy. When the Editor invited me to collaborate in this work, I made it clear that my many engagements both in private business and on public boards would not permit of much time for writing. Beyond giving advice as to the scope of the volume and its chapters, as well as in the revision of the MSS. and the proofs, I have not been able to render much assistance. I am glad, however, to have my name associated with that of Professor Kirkaldy in the volume, but I wish it to be understood that, having borne the burden of preparation, he should also receive any credit which may ensue if the book fulfils, as it is hoped, the object which we have had in view.

50999

CONTENTS

CHAP.	PAGE
INTRODUCTION	xiii
I. THE OPENING OUT OF WORLD TRADE ROUTES	I
II. THE DEVELOPMENT OF THE VEHICLE OF OCEAN TRANSPORT	20
III. THE EFFECTS OF SCIENCE, INVENTION, AND INITIATIVE ON COMMERCIAL DEVELOPMENTS AND METHODS	57
IV. THE EFFECT OF INDUSTRY ON COMMERCE	92
V. THE EFFECTS OF FINANCE, EXCHANGE, AND MODERN METHODS ON COMMERCE	121
VI. THE EMPIRE AND TRADE	151
VII. THE PRESENT AND ITS POSSIBILITIES	170
APPENDICES	194
INDEX	224

APPENDIX A

SOME IMPORTANT SHIPPING DATES

- 1194. Laws of Oléron.
- 1344. Madeira discovered by the English.
- 1492. Columbus discovered Hispaniola.
- 1497. John Cabot discovered the mainland of America.
- 1498. Vasco da Gama discovered the Cape route to India.
- 1508. First mention of Marine Insurance in England.
- 1513. Balboa sighted the Pacific Ocean.
- 1514. Henry VIII. incorporated by Royal Charter the Trinity House.
The *Great Harry* launched at Erith.
- 1545. First Treatise on Navigation published.
- 1599. Mercator's Chart.
- 1608. First effective telescope produced.
- 1660. Board of Trade and Plantations established.
- 1688. First mention of Lloyd's Coffee House in Tower Street.
- 1692. Lloyd's Coffee House removed to Lombard Street.
- 1696. *Lloyd's News* established.
- 1700. First Dock opened at London.
Marine Barometer invented.
- 1715. First Dock opened at Liverpool.
- 1720. First Marine Insurance Company established.
- 1726. *Lloyd's News* re-issued under the name of *Lloyd's List*.
- 1731. The Sextant invented.
- 1735. Harrison invented the Marine Chronometer.
- 1740. Oldest *Lloyd's List* in existence.

- 1767. The *Nautical Almanac* first published.
- 1768. Captain Cook's first voyage of discovery.
- 1774. Lloyd's removed to the Royal Exchange.
- 1779. Murder of Captain Cook.
- 1782. Insurance subjected to Stamp Duty.
- 1786. First Registration of Shipping, London. Board of Trade and Plantations modified; this inaugurated the present Board of Trade, "a Committee of Council on Trade."
First use of rolled plates for boiler construction.
- 1787. Registration of Shipping throughout the Empire
- 1788. Settlement commenced in Australia. Foundation of the City of Sydney.
- 1789. Mutiny on board the *Bounty*.
- 1790. Lifeboats first used at South Shields.
- 1798. River Police instituted at London.
- 1802. The West India Docks, London, opened.
- 1805. The London Docks opened.
Battle of Trafalgar.
- 1806. The East India Docks opened.
- 1807. Abolition of Slave Trade.
- 1812. The *Comet* steamboat on the Clyde.
- 1813. First notice of an iron cable being part of a ship's equipment in Lloyd's Register.
- 1815. First steam vessel on the Thames.
- 1817. New Custom House, London, opened.
- 1818. Auxiliary steamer *Savannah* crossed the Atlantic
- 1819. First iron craft, the *Vulcan*, built on the Forth and Clyde Canal.
- 1820. Royal Astronomical Society founded.
- 1822. First steamer registered by Lloyd's. (Five years later there were eighty-one steamers on the Register).
- 1824. National Life-Boat Institution founded.
- 1825. First auxiliary steam voyage to India.
Iron steamer commenced service on River Shannon.

1828. St. Katherine's Docks, London, opened.
1829. The name *Lloyd's Registry of Shipping* used for the first time.
1830. Royal Geographical Society founded.
1833. Trade with India thrown open.
1836. *Shipping and Mercantile Gazette* founded.
1837. The P. & O. Company founded.
First iron ship registered by Lloyd's. The *Sirius*, 180 tons, built at London, owned at Marseilles.
1838. *Great Western* and *Sirius* commenced regular steam service across the North Atlantic.
The Screw Propeller introduced.
First regular steamboat service across Atlantic ; voyage, seventeen days.
1839. The Cunard Company founded (originally called The British & North American Royal Mail Steam Packet Coy.)
1840. Penny Post.
First Cunard steamer, *Britannia*, sailed.
P. & O. S. N. Co. established.
1843. Iron steamships first built in Great Britain.
1845. Penny steamers on the Thames.
1846. Corn Law passed.
1847. Gold discovered in California.
1848. North-West Passage discovered.
1850. An Act for Improving the Condition of Masters, Mates, and Seamen, and maintaining discipline in the Merchant Service passed.
(This Act made it (i.) compulsory for the senior officers to hold certificates of efficiency; (ii.) necessary to establish shipping offices at the principal ports; (iii.) to house and diet sailors according to rules; and (iv.) obligatory to keep an Official Log.
1851. First Submarine Telegraph.
Queen's Cup won by yacht *America*.

- 1855. Meteorological Office established.
- 1856. Free Navigation of Danube secured under European Commission.
Declaration of Paris signed by European Powers.
- 1857. International Code of Signals established.
- 1858. *Great Eastern* launched.
First message by Atlantic Cable, but submarine Atlantic Cable not permanently successful until 1866.
- 1859. Royal Naval Reserve authorised.
- 1860. First steam ironclad launched.
- 1861. Storm Warnings first issued.
- 1862. International rule of the road at sea settled.
- 1863. Twin Screws used.
- 1864. Royal School of Naval Architecture established.
- 1866. Atlantic Cable laid by *Great Eastern*.
- 1867. Marine Insurance Duty reduced.
- 1869. Suez Canal opened.
Cutty Sark built for John Willis & Son, London, by Scott of Linton, and finished by Denny of Dumbarton.
- 1870. Telegraphs transferred to Government.
Ice breaking vessel first employed.
- 1871. Lloyd's incorporated.
German Empire proclaimed.
- 1872. Daily weather charts first issued.
- 1873. Royal Naval College opened.
- 1874. International Postal Convention.
- 1875. Yacht Racing Association established.
- 1876. Amsterdam-North Sea Canal opened.
- 1877. Telephone invented.
- 1878. Chamber of Shipping of United Kingdom established.
- 1880. Royal Albert Dock, London, opened.
First shipment of frozen mutton from Australia arrived in London.

1881. London Chamber of Commerce incorporated.
Aberdeen (s.) triple expansion engines.
1882. New Eddystone Lighthouse opened.
1884. First compound steam turbine engine built.
1885. First steamer converted to carry oil in bulk.
1886. Tilbury Docks opened.
1887. Colonial Conference in London.
1889. New Barry Docks, Cardiff, opened.
1893. London Shipping Exchange opened.
Imperial Institute inaugurated.
Corinth Ship Canal opened.
1894. Merchant Shipping Act passed, consolidating
former Acts.
Manchester Ship Canal opened.
Turbinia, first turbine steamer, launched on the
Tyne.
Quadruple Expansion Engines invented.
1895. Baltic and North Sea Canal opened.
1897. Blackwall Tunnel opened.
1898. War between United States and Spain.
Imperial Penny Postage instituted.
1899. War in South Africa commenced.
International Meteorological Committee estab-
lished.
First Wireless Telegraphy with France.
1900. Merchant Shipping (Liability of Shipowners)
Act passed.
Subsidised steamship service with Jamaica
: arranged.
Wireless Telegraphy adopted by Admiralty.
Advisory Committee on Commercial Intelli-
gence appointed by Board of Trade.
1901. Commonwealth of Australia inaugurated.
New International Code of Signals in Use.
Discovery, Antarctic Expedition sailed.
International Maritime Congress, Washington.
First turbine steamer on Clyde.

- Export duty of 1s. per ton levied on coal.
 Royal Commission on Coal Supplies of the
 United Kingdom.
1902. Report of Trinity House Fog Signal Committee.
 Report of Admiralty Committee on Merchant
 Cruisers issued.
 Combination of Atlantic S.S. Lines.
 Colonial Conference in London.
 Report of Royal Commission on Port of London
 issued.
 British Pacific Cable opened.
 Messages sent by wireless telegraphy across the
 Atlantic.
1903. Government Agreement with the Cunard Com-
 pany.
 Report of Board of Trade Committee.
 Report of Select Committee of House of Lords
 on Light Load Line issued.
 Light Dues reduced 12½ per cent.
 International Conference on Wireless Tele-
 graphy at Berlin.
 First Report of Royal Commission on Coal
 Supplies issued.
 New Baltic Mercantile and Shipping Exchange
 opened, London.
 Cross Channel Steamers propelled by steam
 turbines.
 Dr. Diesel invented the Internal Combustion
 Marine Engine.
1904. Panama Canal Concession acquired by United
 States.
 Long voyage on oil fuel—*Nebraskan* (s.), Cali-
 fornia to New York, 12,724 knots, in 51 days
 7 hours.
 Steam turbines adopted by Cunard Company.
 Sailing Shipowners' International Union estab-
 lished.

1881. London Chamber of Commerce incorporated.
Aberdeen (s.) triple expansion engines.
1882. New Eddystone Lighthouse opened.
1884. First compound steam turbine engine built.
1885. First steamer converted to carry oil in bulk.
1886. Tilbury Docks opened.
1887. Colonial Conference in London.
1889. New Barry Docks, Cardiff, opened.
1893. London Shipping Exchange opened.
Imperial Institute inaugurated.
Corinth Ship Canal opened.
1894. Merchant Shipping Act passed, consolidating former Acts.
Manchester Ship Canal opened.
Turbinia, first turbine steamer, launched on the Tyne.
Quadruple Expansion Engines invented.
1895. Baltic and North Sea Canal opened.
1897. Blackwall Tunnel opened.
1898. War between United States and Spain.
Imperial Penny Postage instituted.
1899. War in South Africa commenced.
International Meteorological Committee established.
First Wireless Telegraphy with France.
1900. Merchant Shipping (Liability of Shipowners) Act passed.
Subsidised steamship service with Jamaica arranged.
Wireless Telegraphy adopted by Admiralty.
Advisory Committee on Commercial Intelligence appointed by Board of Trade.
1901. Commonwealth of Australia inaugurated.
New International Code of Signals in Use.
Discovery, Antarctic Expedition sailed.
International Maritime Congress, Washington.
First turbine steamer on Clyde.

- Export duty of 1s. per ton levied on coal.
Royal Commission on Coal Supplies of the United Kingdom.
1902. Report of Trinity House Fog Signal Committee.
Report of Admiralty Committee on Merchant Cruisers issued.
Combination of Atlantic S.S. Lines.
Colonial Conference in London.
Report of Royal Commission on Port of London issued.
British Pacific Cable opened.
Messages sent by wireless telegraphy across the Atlantic.
1903. Government Agreement with the Cunard Company.
Report of Board of Trade Committee.
Report of Select Committee of House of Lords on Light Load Line issued.
Light Dues reduced $12\frac{1}{2}$ per cent.
International Conference on Wireless Telegraphy at Berlin.
First Report of Royal Commission on Coal Supplies issued.
New Baltic Mercantile and Shipping Exchange opened, London.
Cross Channel Steamers propelled by steam turbines.
Dr. Diesel invented the Internal Combustion Marine Engine. ;
1904. Panama Canal Concession acquired by United States.
Long voyage on oil fuel—*Nebraskan* (s.), California to New York, 12,724 knots, in 51 days 7 hours.
Steam turbines adopted by Cunard Company.
Sailing Shipowners' International Union established.

Appendix

- Daily Paper with news by wireless telegraphy published at sea on *Campania* (s.).
 Wireless telegraphy weather reports received from Atlantic liners at sea.
 Wireless Telegraphy Act passed.
 New International Telegraphic Code in operation.
 New German steering regulations.
 Report of Departmental Committee on law relating to compensation for injuries to workmen, including seamen, issued.
Victorian, first trans-Atlantic turbine steamer, launched.
 Return of Antarctic Expedition.
1905. Continuous wireless telegraphic communication with land reported by Atlantic liner.
 Baltic and White Sea Conference (of steamship owners) formed.
 Report of Royal Commission on Coal Supplies issued.
 Record Atlantic passage by turbine steamer *Virginian*, 4 days 6 hours.
 Committee on Tonnage Measurement and Rates appointed by Board of Trade.
 Shipowners' Negligence (Remedies) Act passed.
1906. *Lusitania* and *Mauretania*, largest and fastest liners, launched.
 R. C. *Rickmers* (German five-masted barque with auxiliary steam power, 5548 tons) largest sailing vessel, launched.
 Panama Canal—Lock type decided upon.
 Royal Commission on Canals and Waterways appointed.
 New Load Line Tables in operation, 1st March.
 Marine Insurance Act, operating from 1st January, 1907, passed.
 Report of Board of Trade Committee on

- Tonnage Measurement for Dock Dues issued.
- Merchant Shipping Act, 1906, passed, operating from 1st June, 1907, save as otherwise provided.
- Coal export duty of 1s. per ton repealed as from 1st November.
- Royal Commission on Shipping Rings appointed.
- Trials of submarine signalling apparatus conducted by Admiralty.
- Ocean voyages by *Port Jackson* as training ship for boys.
- First wireless telephony experiments.
1907. Colonial Merchant Shipping Conference in London.
- Light dues reduced further $7\frac{1}{2}$ per cent. as from 1st April.
- Report of New Zealand Royal Commission on Fires on Wool Ships issued.
- Merchant Shipping Act, 1907, passed (Tonnage Deduction for Propelling Power), operating from 1st January, 1914, for ships existing, under construction, or contracted for before 1st May, 1907.
- Shipping Federation Committee on Supply of Officers for the Mercantile Marine appointed.
- New Zealand proclaimed a Dominion.
- International Yacht Racing Union formed, and rules adopted.
1908. Gyroscopic apparatus to prevent rolling of ships invented.
- Porhydrometer—automatic cargo weighing apparatus—invented.
- Report of Royal Commission on Lighthouse Administration issued.
- Light dues reduced further 10 per cent. (total

- reduction, 30 per cent.) to take effect 1st April, 1909.
- Stamp Duty on Marine Insurance Voyage Policies reduced from 3d. to 1d. per cent, to take effect 1st January, 1909.
- S.S. *Olaki*, first merchant vessel fitted with combination of reciprocating engines and turbines, built.
- Port of London Authority established by Port of London Act.
1909. From 1st January, German load line regulations equally effective with corresponding British regulations.
- Steamer launched to ferry trains between Sassnitz (Germany) and Trelleborg (Sweden), 65 miles (Feb.)
- Control of Thames below Teddington, and of London Docks, etc., transferred to Port of London Authority as from 31st March.
- British Antarctic Expedition arrived back at New Zealand (March).
- Meeting of International Commission on Weather Signals in London (June).
- Report of Royal Commission on Shipping Rings issued (June).
- Classification of Steel Vessels adopted by Lloyd's Register (June).
- Board of Trade Committee on Pilotage appointed (July).
- Merchant Shipping Advisory Committee re-appointed by Board of Trade, 26th August, for two years.
- New York to London *via* Fishguard, in 5 days 1 hour 40 minutes (August).
- S.S. *Pallion*, self-discharging collier, built.
- Marine Insurance (Gambling Policies) Act passed (October).

- Final Report of Royal Commission on Canals and Inland Navigation issued (December).
1910. Board of Trade Committee on Sight Tests appointed (June).
- British Antarctic Expedition left England (June).
- Lloyd's Register* rules for survey of marine internal combustion engines issued (June).
- International Diplomatic Conference on Maritime Law at Brussels (Sept.)
- The Geared Turbine Engine invented and fitted to the steamer *Vespasian*.
1911. Gyroscopic Compass invented (Jan.).
- Pilotage Committee Report issued (March).
- Reduction of Suez Canal dues 50 centimes per ton, to fcs. 6.75, from 1st January, 1912, announced June.
- General Dock and Railway Strikes (August).
- Lloyd's Act, 1911, passed (August).
- Merchant Shipping (Seamen's Allotment) Act passed (August).
- Ships' Medical Scales Committee Report issued (August).
- International Association of Marine Underwriters founded (Nov.).
- Maritime Conventions Act, 1911, passed (Dec.).
- National Insurance Act, 1911 (Dec.).
- Aeroplanes carry mails, London to Windsor.
- Amundsen at South Pole, December 16th.
1912. Loss of *Titanic*, April 15th. 1513 lives lost.
- London Dock Strike (May).
- Report of Committee on Sight Tests issued (June).
- Departmental Committee on Derelicts and Obstructions to Navigation (June).
- Selandia* fitted with first internal combustion marine engine.

1912. Royal Commission on Liquid Fuel (July).
Board of Trade Committee on Boats and Davits (August).
Suez Canal dues reduced further 50 centimes, from 1st January, 1913 (August).
1913. Australian Navigation Act (February).
Life Saving Appliances, New Rules (March).
Load Line Committee appointed (April).
Boats and Davits Committee Final Report (June).
Volturno (s.) burnt in the Atlantic; use of oil on the rough sea helped in saving passengers and crew (October).
International Conference on Safety of Life at Sea met at the Foreign Office, London, under the presidency of Lord Mersey (November 12).
1914. International Conference on Safety of Life at Sea drew up a Convention, consisting of 74 articles to be signed by all interested Governments. This will standardise the conditions of safety in all the great maritime countries of the world (January 20). Text of Convention published February 15th.
First motor ship voyage round the world (Siam, October, 1913—May, 1914).
War between Austria-Hungary and Servia (July 28).
War between Germany and Russia (August 1, 7.30 p.m. Russian time).
War between Germany and Belgium (Aug. 2).
War between Germany and France (Aug. 3).
War declared between Great Britain and Germany (Aug. 4, 11 p.m.).
Panama Canal opened to commercial vessels (Aug. 15).
Declaration of London, 1909, with certain

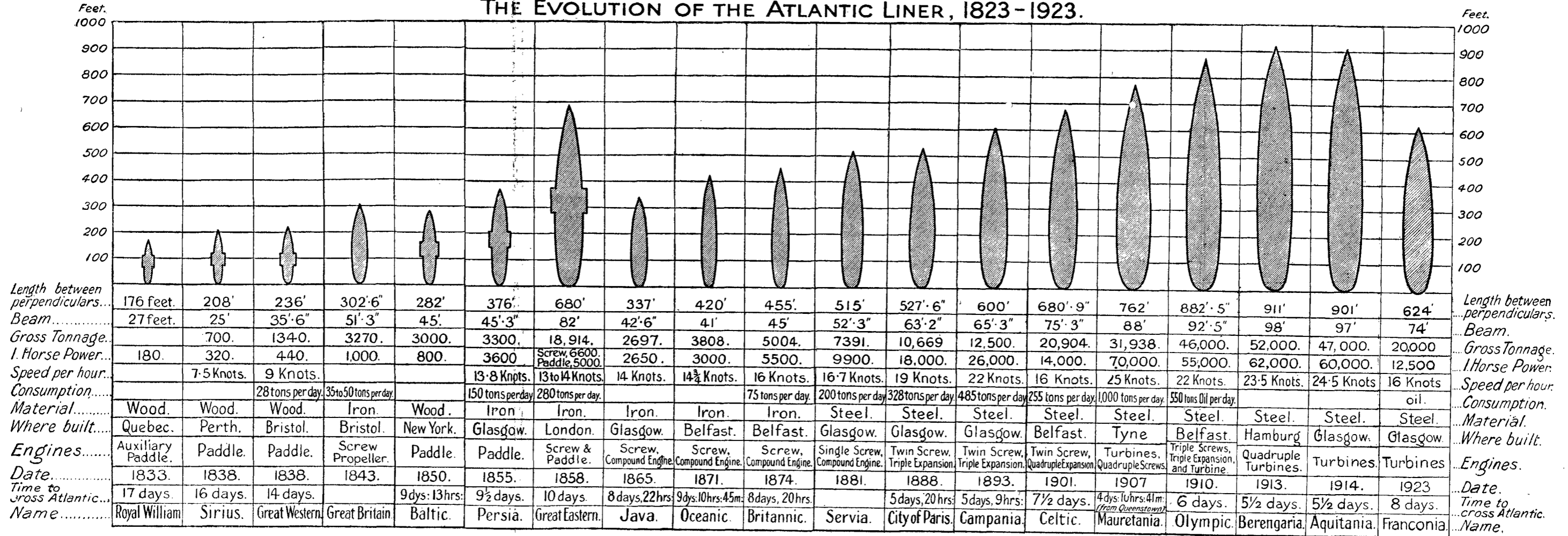
- additions and modifications, adopted during hostilities (Aug. 20).
 Prize Court, first sitting since Crimean War (Sept. 4).
 Turkish Suzerainty over Egypt ended (Dec. 17).
 1915. *Lusitania* sunk by German submarine (May 7), 1,198 lives lost.
 State Insurance against Hostile Aircraft Risks (July 19).
 Panama Canal blocked (Sept. 18); traffic not resumed until April 15th, 1916.
 1916. Suez Canal dues raised to Fcs. 6.75 per ton, April 1; to Fcs. 7.25, October 5; and to Fcs. 7.75 as from January 1, 1917. Ships in ballast, Fcs. 2.50 less.
 Military Service Act, 1916 (May 25), (Compulsory Service).
 1917. Suez Canal dues raised per ton, January 1, to Fcs. 7.75, and July 1 to Fcs. 8.50 for laden ships, and for ships in ballast to Fcs. 5.25 (Jan. 1), and to Fcs. 6 (July 1). From January 1, 1918, the rate will be Fcs. 8.50 per ton for vessels both laden and in ballast.
 Unrestricted German Submarine Warfare commenced (Feb. 1).
 Revolution in Russia (Mar. 12).
 War on Germany declared by United States (Apr. 6, Apr. 8, and Apr. 10).
 1918. Hospital Ship *Rewa* torpedoed (Jan. 4).
 Hospital Ship *Glenart Castle* torpedoed (Feb. 26).
 Launch of *Faith* at San Francisco, the first large concrete ship (Mar. 14).
 First ferro-concrete ship built in Great Britain (May).
 Suez Canal, swing bridge at Kantara completed, (May 11).

- Hospital Ship *Llandoverly Oastle* torpedoed (June 27).
 Irish mail steamer *Leinster* torpedoed; 451 lives lost (Oct. 10).
 Armistice signed by Germany (Nov. 11).
 1919. Wireless telephonic communication established between Ireland and Canada (Mar. 19).
 The ex-*Cutty Sark* berthed in the West India Docks (June 11).
 Naval Memorial Service at St. Paul's Cathedral (June 13).
 Port of Zeebrugge re-opened (June 14).
 Successful Transatlantic Flight by Capt. Sir John Alcock and Lieut. Sir A. W. Brown (June 15).
 German warships sunk by their crews at Scapa Flow (June 21).
 Funeral of Captain Fryatt (July 8).
 Blockade of Germany raised (July 12).
 Atlantic Flight of R34 successfully completed (July 13).
 1920. International Seamen's Conference opened at Genoa (June 15).
 H.M.S. *Vindictive* refloated at Ostend (Aug. 16).
 Steamship *Brussels* sold by auction (Aug. 17).
 Surrendered tonnage by Germany amounted to 1,944,565 (Sept. 16).
 1921. Ex-German steamer *Bismarck* (renamed *Majestic*) purchased by White Star Line (Feb. 12).
 Sir Owen Phillips elected President of Chamber of Shipping of United Kingdom (Feb. 25).
 End of British Ministry of Shipping (Mar. 31).
 Tilbury Cargo Jetty opened by Lord Devonport (June 9).
 Royal Albert Dock Extension at Woolwich opened by the King (July 8).

- R38 airship broke in two and fell into Humber, with loss of 50 lives (Aug. 24).
- Shackleton-Rowett Expedition Ship *Quest* left Thames on voyage to the Antarctic (Sept. 17).
1922. Death of Sir Ernest Shackleton on board the *Quest*, off South Georgia (Jan. 5).
- Japanese Load Line Law of March 8, 1921, came into force on Feb. 1.
- La France*, the largest sailing vessel in the world, wrecked off New Caledonia (about July 13).
- Revised rules for construction and classification of steel ships adopted by *Lloyd's Register* (July 13).
- The Shackleton-Rowett Expedition ship *Quest* arrived at Plymouth (Sept. 16).
- The new American Tariff Law came into operation at midnight (Sept. 22).
- Opening of Port of London Authority Building (Oct. 17).
1923. Typhoon in the Philippines (June 5).
- International Navigation Congress opened by the Duke of York (July 2).
- Inauguration of the new *Warspite* by the Prince of Wales (July 24).
- Typhoon in China; several vessels driven ashore (Aug. 18).
- Earthquake in Japan (Sept. 1).
- Imperial Conference opened in London (Oct. 1).

APPENDIX C

THE EVOLUTION OF THE ATLANTIC LINER, 1823-1923.



APPENDIX B

TABLE OF DISTANCES, SHOWING THE EFFECT OF THE PANAMA ROUTE
ON VOYAGES FROM LONDON AND NEW YORK.

	Via Cape of Good Hope	Via Cape Horn	Via Suez Canal	Via Panama Canal	Saving via Suez over Panama	Saving via Panama over Suez
London to Fremantle	10,900	.....	9,340	14,550	5,210	.....
N. York to Fremantle	¹ 11,571	.....	11,317	11,910	593	.....
London to Adelaide	11,910	.....	10,748	12,996	2,248	.....
N. York to Adelaide	¹ 12,580	.....	12,650	² 10,356	.....	2,224
London to Melbourne	12,220	.....	11,057	12,860	1,803	.....
N. York to Melbourne	¹ 12,850	.....	12,920	² 10,226	.....	2,624
London to Sydney	12,530	.....	11,542	11,579	28	.....
N. York to Sydney	¹ 13,120	.....	13,390	² 9,930	.....	3,460
London to Brisbane	13,030	.....	12,043	11,750	.....	293
N. York to Brisbane	¹ 13,660	.....	13,890	² 9,110	.....	4,780
London to Auckland	13,760	.....	12,600	11,580	.....	1,020
N. York to Auckland	¹ 14,390	.....	13,480	² 8,940	.....	4,540
London to Wellington	13,280	.....	12,447	11,370	.....	1,077
N. York to Wellington	¹ 13,910	.....	13,327	² 8,730	.....	4,597
London to Dunedin	12,940	.....	12,107	11,610	.....	497
N. York to Dunedin	¹ 13,570	.....	13,987	² 8,970	.....	5,017
London to Calcutta	11,730	.....	7,900	17,210	9,310	.....
N. York to Calcutta	¹ 12,360	.....	9,780	² 14,570	4,790	.....
London to Singapore	¹ 11,417	.....	8,241	15,580	7,339	.....
N. York to Singapore	¹ 11,040	.....	10,121	12,940	2,819	.....
London to Manila	12,980	.....	9,560	14,260	4,700	.....
N. York to Manila	¹ 13,610	.....	11,440	11,620	180	.....
London to Hong Kong	13,030	.....	9,681	14,410	4,729	.....
N. York to Hong Kong	¹ 13,660	.....	11,561	11,770	219	.....
London to Shanghai	13,790	.....	10,441	15,430	4,989	.....
N. York to Shanghai	¹ 13,420	.....	12,321	11,240	.....	1,081
London to Yokohama	14,287	.....	11,112	12,860	1,748	.....
N. York to Yokohama	¹ 14,917	.....	12,992	10,220	.....	2,772
London to Coronel	.....	8,557	.....	7,720	.....	837
N. York to Coronel	.....	8,217	.....	5,080	.....	3,138
London to Valparaiso	.....	8,777	.....	7,360	.....	1,417
N. York to Valparaiso	.....	8,452	.....	4,720	.....	3,732
London to Iquiqui	.....	9,555	.....	6,840	.....	2,715
N. York to Iquiqui	.....	9,233	.....	4,200	.....	5,033
London to Callao	.....	10,013	.....	6,190	.....	3,823
N. York to Callao	.....	9,688	.....	3,550	.....	6,138
London to San Francisco	.....	13,548	.....	8,010	.....	5,538
N. York to San Francisco	.....	13,223	.....	5,370	.....	7,853
London to Portland, Or.	.....	14,163	.....	8,625	.....	5,538
N. York to Portland, Or.	.....	13,838	.....	5,985	.....	7,853
London to Vancouver City	.....	14,348	.....	8,810	.....	5,538
N. York to Vancouver City	.....	14,023	.....	6,170	.....	7,853

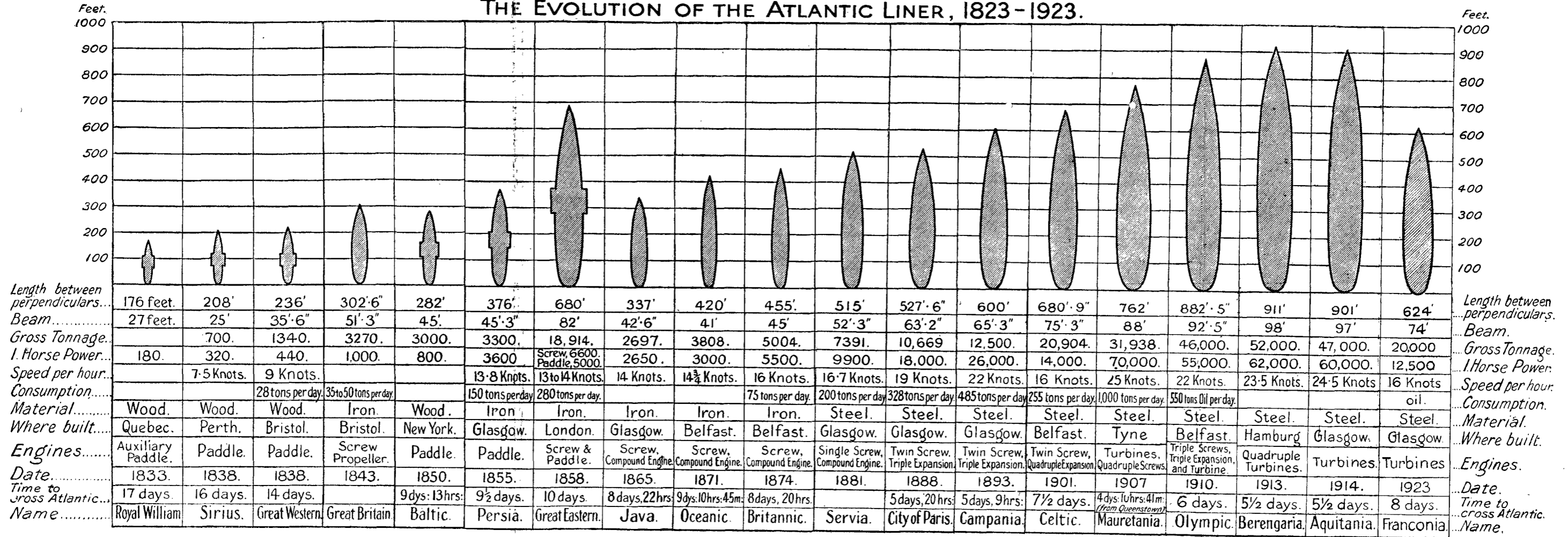
¹ Via St. Vincent.

² Via Rapa and Wellington.

³ Via Rapa.

APPENDIX C

THE EVOLUTION OF THE ATLANTIC LINER, 1823-1923.



APPENDIX D

EXTRACTED FROM LLOYD'S REGISTER OF SHIPPING

GROSS TONNAGE OF OVER 100 TONS :

		1920	1923
United Kingdom ..	Sail	219,771	166,371
	Steam	18,110,653	19,115,178
British Possessions	Sail	220,001	196,667
	Steam	2,032,227	2,579,896
British Empire ..	Sail	439,772	363,038
	Steam	20,142,880	21,695,074
Russia (including Finland)	Sail	24,983	—
	Steam	509,564	—
Norway	Sail	239,828	175,942
	Steam	1,979,560	2,375,970
Sweden	Sail	76,502	61,490
	Steam	996,423	1,198,716
Denmark	Sail	83,967	59,119
	Steam	719,444	937,743
Germany	Sail	253,233	80,305
	Steam	419,438	2,509,768
Netherlands ..	Sail	20,004	18,531
	Steam	1,773,392	2,607,210
Belgium	Sail	4,689	11,620
	Steam	410,423	605,050
France	Sail	281,965	284,304
	Steam	2,963,229	3,452,940
Portugal	Sail	39,967	40,290
	Steam	235,698	261,317
Spain	Sail	59,750	61,490
	Steam	937,280	1,198,716

Appendix

Italy	..	..	Sail	123,964	152,966
			Steam	2,118,429	2,880,776
Austria	..	..	Sail	—	—
			Steam	—	—
Greece	..	..	Sail	33,265	7,967
			Steam	496,996	747,474
United States of America :					
Seagoing	..	..	Sail	1,383,751	1,170,814
			Steam	12,406,123	13,426,221
Northern Lakes	..	..	Sail	88,861	89,611
			Steam	2,118,568	2,197,008
Philippine Islands			Sail	2,302	151
			Steam	49,684	61,558
China	..	..	Sail	—	—
			Steam	142,834	222,970
Japan	..	..	Sail	—	—
			Steam	2,995,878	3,604,147
				<hr/>	<hr/>
Total	..	..		54,572,646	62,560,256
World's Total	..	..	Sail	3,409,377	2,830,865
			Steam	53,904,688	64,335,373

SUPPLEMENTARY FIGURES :

				1923	
Estonia	..	..	..	Sail	17,195
				Steam	32,208
Finland	..	..	..	Sail	82,455
				Steam	117,799
Latvia	..	..	..	Sail	6,276
				Steam	32,730
Jugo-Slavia	..	..	..	Sail	1,176
				Steam	119,778

APPENDIX E

NET TONNAGE OF EMPIRE AND WORLD SHIPPING FROM 1850 TO 1910 SHOWING—

- (a) Sailing ship and Steamship Tonnage.
 - (b) World's Totals.
 - (c) The British, United Kingdom, United States of America, and German Percentage of the World's Total.
 - (d) These Percentages also shown in terms of Steamship Tonnage, reckoning 1 ton of steam = 4 tons sailing.
-

VALUE OF TOTAL IMPORTS (including Bullion and Specie).¹ (a) From All Countries; (b) From United Kingdom.

POSSESSIONS	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
	1850	1850	1855	1855	1860	1860	1865	1865
India	£ 13,696,696	£ 7,605,671	£ 14,470,927	£ 9,853,646	£ 40,622,103	£ 26,503,899	£ 49,514,275	£ 23,748,180
Ceylon	1,488,678	266,574	2,388,191	448,496	3,551,239	1,043,052	5,022,170	904,255
Hong Kong (no returns)	—	—	—	—	—	—	—	—
Australia:								
New South Wales	2,078,338	1,070,511	4,668,519	2,710,267	7,519,285	4,160,307	9,928,595	4,349,371
Victoria,	744,925	598,088	12,007,939	5,617,149	15,093,730	9,564,093	13,257,537	7,147,216
South Australia	845,572	535,677	1,370,938	953,677	1,639,591	939,345	2,927,596	1,741,691
Western Australia	52,351	34,924	105,220	66,535	169,075	133,655	168,414	100,075
Tasmania	658,540	535,471	1,559,797	920,695	1,068,411	584,174	762,375	283,056
Queensland	—	—	—	—	742,023	56,730	2,505,559	713,545
New Zealand	—	—	813,460	328,909	1,548,333	878,569	5,594,977	2,606,994
Cape of Good Hope	1,277,046	1,165,624	1,178,543	1,017,582	2,677,586	2,187,207	2,125,332	1,700,574
N. America—Canada:	3,489,466	1,979,162	7,414,966	2,733,588	7,078,343	3,258,900	9,295,931	4,382,473
New Brunswick	815,531	397,639	1,431,330	377,845	1,446,740	479,875	1,476,374	479,600
Nova Scotia	1,056,213	—	1,882,703	—	1,702,310	595,119	2,876,332	1,263,198
Prince Edward Island	123,117	55,980	268,406	7,528	230,054	80,990	381,015	160,131
British Columbia	—	—	—	—	257,389	—	497,734	—
Vancouver Island	—	—	—	—	—	—	594,297	202,474
Newfoundland	867,316	359,512	1,152,804	375,637	1,254,128	489,969	1,104,084	429,415
West Indies:								
Bahamas	92,756	24,302	192,751	34,057	234,029	25,442	1,470,467	417,326
Turk's Islands	—	—	39,699	—	42,059	6,483	80,549	12,961
Jamaica	1,218,073	732,227	899,507	494,019	1,202,854	701,211	1,050,984	642,785
Virgin Islands	5,504	—	3,661	—	15,245	154	8,638	—
St. Christopher	92,419	49,204	96,098	53,554	158,034	75,931	151,394	77,890
Nevis	16,474	—	19,728	4,559	35,255	8,456	37,176	11,714
Antigua	163,622	72,136	192,506	74,757	225,791	96,357	160,571	64,999
Montserrat	9,332	1,122	7,704	—	20,060	509	15,795	834
Dominica	57,656	24,366	52,509	—	62,941	28,013	52,374	21,107
St. Lucia	60,538	19,411	55,514	12,831	97,900	33,795	70,758	26,623
St. Vincent	167,310	93,584	112,493	43,536	150,343	62,256	121,145	35,817
Barbados	734,359	464,651	644,784	296,098	941,761	420,267	953,335	366,053
Grenada	133,647	55,331	85,779	35,731	126,206	53,258	114,111	56,920
Tobago	52,555	17,087	37,360	10,374	51,785	14,261	47,487	17,990
Trinidad	476,910	267,504	554,534	271,615	1,179,901	356,757	810,347	430,815

¹ See *Statistical Abstracts*, 1850 onwards.

VALUE OF TOTAL IMPORTS (including Bullion and Specie) (a) From All Countries; (b) From United Kingdom

POSSESSIONS	(a) 1870	(b) 1870	(a) 1875	(b) 1875	(a) 1880	(b) 1880	(a) 1885	(b) 1885
India	46,882,327	30,324,931	44,363,160	34,247,081	52,821,398	37,058,927	71,133,666	49,936,441
Ceylon	4,634,297	1,531,491	5,361,240	1,417,115	5,029,435	1,497,139	3,384,925	843,171
Hong Kong (no returns)								
Australia:								
New South Wales ..	7,213,291	3,200,706	13,490,200	6,062,226	13,950,075	6,536,661	23,737,461	11,885,597
Victoria	12,455,758	6,198,805	16,685,874	7,809,285	14,556,894	5,892,834	18,044,604	8,946,816
South Australia ..	2,029,794	1,196,293	4,203,802	2,381,673	5,581,497	3,002,342	5,435,722	2,795,830
Western Australia ..	213,259	102,579	349,841	196,739	353,669	138,324	650,391	279,937
Tasmania	792,916	282,342	1,185,942	505,101	1,369,223	288,495	1,757,486	659,225
Queensland	1,536,799	436,436	3,328,009	1,262,041	3,087,296	839,790	6,422,490	2,751,439
New Zealand	4,639,015	2,685,736	8,029,172	5,103,610	6,162,011	3,479,217	7,479,921	5,227,551
Cape of Good Hope ..	2,502,043	1,956,305	5,768,743	4,724,053	8,078,048	6,183,309	4,991,688	3,877,537
N. America—Canada:								
New Brunswick								
Nova Scotia								
Prince Edward Is.								
British Columbia								
Vancouver Island								
Newfoundland	1,386,635	595,207	1,532,944	535,386	1,451,300	545,779	1,395,521	458,627
West Indies:								
Bahamas	283,970	55,886	172,183	43,606	180,815	38,786	235,060	50,058
Turk's Islands	35,345	3,397	23,340	1,917	26,206	2,068	27,858	2,726
Jamaica	1,300,212	760,431	1,759,942	966,470	1,475,197	777,627	1,487,833	789,506
Virgin Islands	7,886	—	7,258	—	8,268	—	5,846	—
St. Christopher	196,051	89,000	132,858	61,598	168,027	77,205	152,874	64,560
Nevis	54,286	17,466	23,095	4,565	30,546	11,118	—	—
Antigua	104,178	71,798	180,363	64,233	160,767	82,856	144,444	61,741
Montserrat	23,043	1,915	26,678	2,286	25,364	6,816	30,636	6,889
Dominica	60,278	22,506	62,312	17,245	69,941	26,231	50,205	18,550
St. Lucia	106,285	40,882	150,740	75,120	127,362	44,852	93,739	41,856
St. Vincent	137,474	56,175	150,082	59,440	150,950	70,825	101,032	46,963
Barbados	1,069,868	413,908	1,187,493	443,091	1,170,736	444,818	890,690	313,067
Grenada	104,475	54,433	118,385	57,314	138,619	67,334	138,105	63,325
Tobago	61,448	32,052	67,772	26,737	45,138	6,529	30,758	16,326
Trinidad	1,042,678	448,310	1,507,794	531,612	2,382,632	830,799	2,241,478	654,704

VALUE OF TOTAL IMPORTS (including Bullion and Specie) (a) From All Countries; (b) From United Kingdom

POSSESSIONS	(a) 1890	(b) 1890	(a) 1895	(b) 1895	(a) 1900	(b) 1900
India	£ 90,909,856	£ 63,456,814	£ 86,304,739	£ 56,154,581	£ 70,314,234	£ 45,869,469
Ceylon	4,145,519	1,388,041	4,644,135	1,116,101	8,155,984	2,246,893
Australia :						
New South Wales ..	22,615,004	8,628,007	15,992,415	6,420,107	27,561,071	9,923,117
Victoria	22,954,015	9,607,193	12,472,344	4,759,546	18,301,811	7,055,028
South Australia, except Northern Territory	8,262,673	2,483,416	5,585,601	1,857,989	8,034,552	2,397,684
Northern Territory ..	114,135	7,482	95,280	5,711	139,666	32,403
Western Australia ..	874,447	415,149	3,774,951	943,477	5,962,178	2,225,746
Tasmania	1,897,512	680,760	1,094,457	315,172	2,073,657	628,663
Queensland	5,066,700	2,120,071	5,349,007	2,308,695	7,184,112	3,100,706
New Zealand						
Cape of Good Hope ..	10,106,466	8,535,266	19,094,880	15,802,676	19,678,336	13,018,953
North America :						
Dominion of Canada ..	25,039,365	8,915,803	22,763,359	6,396,932	38,963,530	9,343,622
Newfoundland	1,326,139	453,065	1,233,233	305,120	1,540,510	457,059
West Indies :						
Bahamas	222,512	44,978	172,581	36,128	335,269	75,403
Turk's Island	42,369	10,146	26,735	3,318	29,564	3,385
Jamaica	2,188,937	1,232,085	2,288,946	1,106,177	1,722,069	814,639
Virgin Islands	4,145	234	4,576	269	3,387	117
St. Christopher .. .						
Nevis	181,546	90,383	172,281	65,538	136,435	51,221
Antigua	184,590	91,958	144,864	57,532	125,304	47,377
Montserrat	24,096	9,111	24,480	9,975	26,911	6,893
Dominica	57,382	27,388	69,789	30,062	80,144	35,474
St. Lucia	206,693	129,683	154,945	74,512	403,598	220,831
St. Vincent	97,809	44,629	64,842	27,687	98,591	35,538
Barbados	1,193,723	508,698	956,921	391,435	1,045,252	446,186
Grenada	170,081	93,258	175,712	78,079	232,096	105,592
Trinidad	2,248,893	822,280	2,276,864	988,553		
Tobago	23,404	16,881	13,643	8,821	2,500,258	881,894

VALUE OF TOTAL IMPORTS (including Bullion and Specie) (a) From All Countries ; (b) From United Kingdom

POSSESSIONS	(a)	(b)	(a)	(b)	(a)	(b)	1919	U.K. 1919
	1905	1905	1910	1910	1915	1915		
	£	£	£	£	£	£		£
India	101,369,297	64,750,453	121,057,546	72,202,028	106,660,201	60,224,403	299,941,297	143,847,619
Ceylon	7,682,482	1,678,694	10,901,338	2,810,175	11,229,736	2,390,009	24,271,969	3,389,084
Australia :								
New South Wales ..	14,485,123	8,602,288	23,238,466	14,385,310	27,323,189	15,367,746	46,013,102	15,224,651
Victoria	12,957,855	7,470,695	20,002,606	11,648,160	21,050,310	12,388,255	35,026,311	14,966,469
South Australia ..	3,232,614	2,033,359	5,976,169	3,512,216	4,833,297	2,878,662	6,502,319	2,867,095
Western Australia ..	3,769,395	2,278,933	4,538,118	2,729,176	3,986,198	2,414,839	8,083,852	1,444,356
Tasmania	738,117	586,992	831,137	622,282	811,255	562,764	608,786	402,277
Queensland	3,163,627	2,102,450	5,427,855	3,749,297	6,428,688	4,284,389	6,075,649	3,064,892
New Zealand	12,828,857	7,795,284	17,051,583	10,498,771	21,728,834	10,623,426	30,671,698	11,523,653
Cape of Good Hope ..	20,000,913	12,386,880	38,940,694	24,002,537	33,833,542	19,622,310	50,803,120	23,814,530
North America :								
Dominion of Canada ..	54,849,297	12,444,089	97,073,105	22,731,731	116,037,303	16,378,839	218,819,670	25,974,541
Newfoundland	2,112,966	545,731	2,631,049	604,416	2,538,773	475,233	6,844,421	493,303
West Indies :								
Bahamas	308,544	76,978	329,014	81,266	363,410	58,580	539,242	34,179
Turk's Island	28,230	5,490	27,916	5,498	27,621	2,880	38,343	2,141
Jamaica	1,941,938	950,332	2,614,944	1,112,535	2,327,459	772,420	5,085,615	1,012,576
Windward Islands :								
St. Lucia	285,987	95,087	277,208	79,547	265,933	72,726	322,769	55,817
St. Vincent	69,097	25,471	93,280	38,797	90,892	33,825	185,128	58,121
Grenada	233,043	100,082	275,809	148,083	259,995	89,936	438,548	94,467
Barbados	1,042,562	445,455	1,345,194	592,641	1,270,154	441,449	3,875,539	737,861
Leeward Islands	420,806	177,119	567,016	229,193	581,592	192,073	974,142	169,999
Trinidad and Tobago ..	3,303,611	957,594	3,343,011	979,753	4,429,813	1,096,518	6,217,234	945,733

* From 1910 figures are for the Union of South Africa.

VALUE OF TOTAL EXPORTS (including Bullion and Specie) (a) To All Countries; (b) To United Kingdom

POSSESSIONS	(a) 1850	(b) 1850	(a) 1855	(b) 1855	(a) 1860	(b) 1860	(a) 1865	(b) 1865
India	£ 18,283,543	£ 7,144,959	£ 20,194,255	£ 7,536,941	£ 28,889,210	£ 11,261,375	£ 69,471,794	£ 46,873,208
Ceylon	1,246,956	729,525	1,974,777	1,015,074	2,550,586	1,638,994	3,565,157	2,420,056
Australia :								
New South Wales ..	2,399,580	1,038,340	2,884,130	1,499,792	5,072,020	1,482,717	8,191,170	3,319,628
Victoria	1,041,796	952,538	13,493,338	11,359,145	12,962,704	9,346,619	13,150,748	7,680,339
South Australia ..	570,817	297,273	988,215	449,284	1,783,716	783,898	3,129,846	964,895
Western Australia ..	22,135	12,735	46,314	25,199	89,247	55,190	179,147	104,673
Tasmania	613,850	321,876	1,428,629	445,557	962,170	421,428	880,965	403,559
Queensland	—	—	—	—	523,476	—	1,153,464	240,550
New Zealand	—	—	365,868	30,869	588,953	412,246	3,713,218	1,186,085
Cape of Good Hope ..	636,833	611,817	1,102,670	958,281	2,100,980	1,547,351	2,297,173	1,968,917
North America :								
Canada	2,659,684	1,250,367	5,792,150	1,384,611	7,116,142	2,638,165	8,850,240	3,067,918
New Brunswick ..	658,018	489,551	826,381	547,589	916,372	547,468	1,153,068	540,552
Nova Scotia	671,286	—	1,472,215	—	1,323,907	59,441	1,766,139	152,948
Prince Edward Is. ..	59,685	16,999	147,114	19,616	201,434	34,016	291,546	64,876
British Columbia ..	—	—	—	—	11,400	—	33,476	10,487
Vancouver Island ..	—	—	—	—	—	—	120,254	26,804
Newfoundland	975,770	381,543	1,142,212	393,349	1,271,712	353,025	1,144,375	343,678
West Indies :								
Bahamas	54,239	8,081	111,670	22,519	157,358	37,901	2,063,474	1,385,646
Turk's Islands	—	—	27,542	—	33,911	—	62,004	2,547
Jamaica	1,217,133	920,077	1,003,325	788,288	1,225,676	991,473	912,004	723,153
Virgin Islands	4,911	—	8,199	—	17,021	3,000	8,637	—
St. Christopher ..	81,954	68,328	144,642	134,328	187,167	166,639	196,175	166,960
Nevis	17,198	8,574	38,977	36,476	40,666	27,457	36,651	20,536
Antigua	131,882	131,882	309,260	276,775	254,002	206,247	192,632	176,739
Montserrat	8,578	1,239	19,986	—	17,043	2,622	20,916	14,927
Dominica	58,265	49,510	—	—	80,458	76,362	53,181	48,910
St. Lucia	49,128	40,457	54,980	47,509	105,947	93,642	107,321	98,597
St. Vincent	172,428	157,402	101,912	86,947	172,265	163,331	147,854	140,701
Barbados	831,531	672,881	790,330	572,243	984,294	665,756	1,161,161	702,318
Grenada	105,510	84,215	91,343	82,011	125,502	110,682	118,045	94,477
Tobago	45,664	43,479	47,387	44,794	67,124	59,409	46,762	43,059
Trinidad	319,394	356,735	387,999	360,398	714,605	525,595	820,109	637,816

VALUE OF TOTAL EXPORTS (including Bullion and Specie) (a) To All Countries; (b) To United Kingdom

POSSESSIONS	(a) 1870	(b) 1870	(a) 1875	(b) 1875	(a) 1880	(b) 1880	(a) 1885	(b) 1885
	£	£	£	£	£	£	£	£
India	53,513,729	27,798,698	57,984,549	27,972,316	69,247,511	27,760,927	84,989,502	34,702,736
Ceylon	3,803,731	2,907,146	5,375,410	3,709,012	4,742,614	3,250,228	2,683,680	1,564,768
Australia :								
New South Wales ..	5,852,765	2,492,640	13,671,580	6,374,503	15,525,138	7,525,637	16,750,107	7,293,133
Victoria	12,470,014	6,205,455	14,766,974	6,980,983	15,954,559	9,249,873	15,551,758	8,159,135
South Australia ..	2,419,489	1,136,463	4,805,050	2,612,817	5,574,505	3,695,498	5,514,700	3,332,687
Western Australia ..	200,985	99,583	391,217	248,542	499,183	295,129	446,692	289,902
Tasmania	648,709	253,200	1,085,976	510,757	1,511,931	701,967	1,313,693	191,018
Queensland	2,006,635	667,099	3,857,576	879,031	3,448,160	780,808	5,243,404	1,618,333
New Zealand	4,822,756	2,488,916	5,828,627	4,227,760	6,352,692	4,767,068	6,819,939	4,906,907
Cape of Good Hope ..	2,503,211	2,123,061	4,393,320	4,000,158	4,488,872	4,110,924	6,224,261	5,636,827
North America :								
Canada								
New Brunswick ..								
Nova Scotia								
Prince Edward Is.								
British Columbia								
Vancouver Island								
Newfoundland ..	1,297,974	435,200	1,340,000	443,678	1,174,109	370,357	984,710	259,330
West Indies :								
Bahamas	190,853	47,886	108,893	23,079	121,429	29,533	180,279	20,155
Turk's Islands	18,855	—	26,364	—	27,609	—	30,853	92
Jamaica	1,283,026	898,080	1,410,485	1,154,016	1,512,979	1,018,227	1,408,848	532,971
Virgin Islands	6,808	—	5,842	—	5,147	—	4,917	—
St. Christopher ..	275,080	230,628	140,542	114,101	186,012	128,153	199,074	53,661
Nevis	64,119	47,607	57,914	33,770	37,212	34,567	—	—
Antigua	234,012	215,651	249,677	203,550	263,551	119,226	158,980	37,463
Montserrat	29,191	26,292	33,555	31,540	29,121	22,727	16,285	3,955
Dominica	62,247	56,405	71,623	58,561	64,671	50,572	52,486	13,018
St. Lucia	147,172	135,247	159,468	141,957	194,694	172,139	121,261	64,559
St. Vincent	221,140	201,875	207,616	193,623	158,947	140,038	130,342	50,601
Barbados	973,020	544,455	1,474,910	782,434	1,166,389	504,093	1,003,894	342,988
Grenada	127,184	114,154	171,332	139,908	171,728	152,545	178,721	158,900
Tobago	82,616	79,267	92,015	90,205	77,615	71,459	38,437	26,414

VALUE OF TOTAL EXPORTS (including Bullion and Specie) (a) To All Countries; (b) To United Kingdom

POSSESSIONS	(a)	(b)	(a)	(b)	(a)	(b)
	1890	1890	1895	1895	1900	1900
India	£ 102,350,526	£ 33,607,270	£ 118,594,592	£ 38,612,001	£ 81,297,307	£ 28,618,212
Ceylon	3,834,550	2,489,751	4,278,401	3,173,114	6,330,818	3,753,035
Australia :						
New South Wales ..	22,045,937	6,623,431	21,934,785	9,371,418	28,164,516	8,273,272
Victoria	13,266,222	6,850,014	14,547,732	8,068,121	17,422,552	6,363,685
South Australia, except						
Northern Territory ..	8,827,378	4,296,647	7,177,038	2,362,593	8,029,157	2,325,519
Northern Territory ..	155,058	5,047	175,704	15,530	162,219	24,760
Western Australia ..	671,813	335,162	1,332,554	328,125	6,852,054	4,268,419
Tasmania	486,992	323,239	1,373,063	202,870	2,610,617	688,600
Queensland	8,554,512	2,365,673	8,982,600	3,418,516	9,581,562	3,271,656
Cape of Good Hope ..	9,970,370	9,353,275	16,904,756	16,357,104	8,147,670	6,867,170
North America :						
Dominion of Canada ..	19,879,962	9,935,691	23,350,439	12,710,340	39,430,423	22,137,610
Newfoundland	1,270,768	317,124	1,278,080	359,781	1,772,790	399,060
West Indies :						
Bahamas	168,121	14,095	124,011	14,771	207,223	11,909
Turk's Island	42,651	1,499	21,688	25	34,584	293
Jamaica	1,902,814	614,912	1,873,106	517,504	1,797,077	338,977
Virgin Islands	5,050	—	3,818	—	2,812	—
St. Christopher						
Nevis	225,233	12,982	140,542	9,354	109,783	2,261
Antigua	218,223	9,626	87,125	9,064	111,849	10,659
Montserrat	22,755	7,825	17,189	10,610	8,115	1,281
Dominica	22,296	11,265	39,471	19,680	68,452	47,472
St. Lucia	141,759	61,087	102,155	24,269	104,881	23,519
St. Vincent	104,745	26,000	68,690	25,876	110,327	71,584
Barbados	1,204,390	130,540	587,298	69,760	919,011	68,251
Grenada	266,302	241,221	174,497	140,736	311,681	259,079
Trinidad	2,179,432	857,024	2,065,104	907,493		
Tobago	19,371	1,956	10,517	595	2,584,549	983,055

VALUE OF TOTAL EXPORTS (including Bullion and Specie)
(a) To All Countries; (b) To United Kingdom

POSSESSIONS	1905	U.K. 1905	1910	U.K. 1910	1915	U.K. 1915	1919	U.K. 1919
India	122,577,946	35,495,051	149,051,475	36,916,497	144,243,059	52,789,636	361,702,524	109,792,156
Ceylon	6,832,671	3,598,548	11,104,607	5,159,814	18,225,145	9,804,121	36,705,748	15,464,153
Australia :								
New South Wales ..	21,440,620	8,169,683	32,035,451	13,318,099	28,106,971	16,258,252	51,027,359	23,693,863
Victoria	12,991,736	6,420,944	18,188,236	10,259,719	12,349,662	8,364,832	28,095,159	16,122,709
South Australia ..	6,428,232	2,889,499	10,243,197	5,440,408	3,579,654	1,903,815	11,570,470	6,820,899
Western Australia ..	9,070,405	4,211,503	5,339,263	3,173,952	3,120,798	1,451,578	9,444,021	5,045,299
Tasmania	1,918,538	1,711,278	513,410	351,466	420,007	367,397	1,002,093	587,674
Queensland	4,991,504	3,299,483	8,171,593	5,154,668	13,015,484	10,218,144	12,447,616	9,326,439
New Zealand	15,655,947	12,087,818	22,180,209	18,633,118	31,748,912	25,389,030	53,970,075	44,312,048
Cape of Good Hope ..	33,812,210	31,825,451	53,939,112	47,509,070	35,012,365	28,189,797	99,818,536	77,441,642
North America :								
Dominion of Canada ..	41,792,913	20,958,192	61,090,364	28,153,940	181,479,348	95,188,922	264,479,846	101,947,358
Newfoundland	2,193,143	398,972	2,430,694	374,982	2,700,359	657,028	7,561,282	557,690
West Indies :								
Bahamas	222,905	13,198	193,803	24,064	243,431	54,174	382,140	63,221
Turk's Island	24,022	225	24,461	422	30,487	—	33,554	580
Jamaica	1,843,180	356,802	2,568,222	530,031	2,228,665	849,261	5,627,328	3,567,103
Windward Islands :								
St. Lucia	109,028	57,648	122,094	81,148	165,723	144,331	231,734	161,114
St. Vincent	53,078	24,405	101,180	63,981	98,545	64,018	153,892	87,523
Grenada	283,756	181,971	291,760	192,737	466,318	300,922	637,369	328,642
Barbados	935,844	180,454	1,004,202	129,218	1,053,330	56,419	2,753,692	348,589
Leeward Islands ..	423,727	122,970	558,165	188,984	670,101	390,349	1,172,775	802,351
Trinidad and Tobago ..	3,168,706	828,411	3,467,588	746,102	5,378,573	1,959,530	7,256,594	2,675,867

* From 1910 figures are for the Union of South Africa

TOTAL TONNAGE OF VESSELS (a) ALL COUNTRIES AND (b) BRITISH, ENTERED
AND CLEARED (exclusive of Coasting Trade)

POSSESSIONS	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
	1850	1850	1855	1855	1860	1860	1865	1865
India	1,403,633	—	2,108,511	1,596,960	2,939,589	2,352,486	4,268,666	3,529,287
Ceylon	490,662	—	634,482	602,950	790,249	729,025	1,797,676	1,024,016
Hong Kong	345,202	—	—	—	1,555,645	724,693	2,134,164	1,276,455
Australia :								
New South Wales ..	498,064	—	715,805	—	859,319	689,251	1,326,182	1,242,161
Victoria	195,117	143,365	1,133,283	954,373	1,180,779	882,016	1,180,324	1,091,615
South Australia ..	174,455	159,371	225,923	189,078	209,036	181,256	357,290	326,410
Western Australia ..	13,988	7,425	54,430	38,547	117,179	85,665	104,152	94,098
Tasmania	208,865	—	320,488	—	234,415	231,444	204,494	202,370
Queensland,	—	—	—	—	85,239	84,562	340,380	331,987
New Zealand	—	—	168,439	114,094	280,569	201,205	578,645	537,300
Cape of Good Hope ..	358,193	300,937	359,171	261,307	544,878	388,217	319,499	427,794
North America :								
Canada	1,066,079	882,373	870,794	771,043	1,653,225	1,453,474	—	—
New Brunswick	901,605	—	1,254,750	—	1,297,374	826,600	1,562,037	1,103,861
Nova Scotia	1,010,842	—	—	—	1,449,869	—	1,876,261	1,618,462
Prince Edward Is. ..	27,932	—	35,935	—	173,796	161,875	344,498	331,431
<i>cleared only</i>								
Newfoundland	268,460	243,652	271,824	250,983	404,294	363,749	270,403	248,292
British Columbia ..	—	—	—	—	62,969	19,184	109,869	101,634
Vancouver Island ..	—	—	—	—	254,123	64,828	313,064	138,339
West Indies :								
Bahamas	64,434	—	55,934	—	59,928	35,132	267,137	209,902
Turk's Island	—	—	40,648	19,936	100,749	33,685	96,696	53,734
Jamaica	204,784	118,600	179,912	105,808	177,935	125,232	283,865	245,316
Virgin Islands	7,368	—	6,257	—	9,258	9,247	7,116	7,054
St. Christopher	38,321	—	37,489	—	62,991	38,297	59,064	47,708
Nevis	—	—	—	—	13,207	8,154	14,459	11,299
Antigua	—	—	67,955	—	70,743	53,297	46,043	42,619
Montserrat	7,855	—	8,101	—	15,275	15,027	9,792	9,592
Dominica	24,114	—	—	—	18,777	14,055	16,176	13,113
St. Lucia	23,688	—	17,468	12,806	25,212	22,325	18,204	16,604
St. Vincent	—	—	31,790	29,950	48,296	34,601	31,356	28,978
Barbados	189,684	62,696	193,670	62,786	243,304	178,865	290,782	234,718
Grenada	44,120	31,620	39,314	35,045	40,487	28,312	33,165	28,006
Tobago	16,587	—	9,693	—	13,021	12,297	11,045	11,045
Trinidad	113,726	67,064	130,426	98,083	183,670	123,010	204,196	190,304

T.C.S.

219

R

**TOTAL TONNAGE OF VESSELS (a) ALL COUNTRIES AND (b) BRITISH, ENTERED
AND CLEARED (exclusive of Coasting Trade)**

POSSESSIONS	(a) 1870	(b) 1870	(a) 1875	(b) 1875	(a) 1880	(b) 1880	(a) 1885	(b) 1885
India	4,009,151	3,476,441	4,825,542	3,810,021	5,703,087	4,804,521	7,294,589	6,201,443
Ceylon	1,423,945	1,225,324	2,210,403	1,874,924	2,906,768	2,464,274	3,561,192	2,955,159
Hong Kong ..	2,640,347	1,649,250	3,893,687	2,791,816	5,078,868	3,758,160	7,699,099	6,015,371
Australia :								
New South Wales ..	1,461,762	1,333,410	2,168,187	2,001,641	2,432,779	2,259,924	4,133,077	3,615,582
Victoria	1,344,862	1,220,997	1,673,885	1,561,885	2,179,899	2,071,429	3,260,158	2,856,453
South Australia ..	287,989	275,779	611,381	569,694	1,200,904	1,097,131	1,964,132	1,669,377
Western Australia ..	133,446	116,166	134,161	128,138	250,429	240,559	468,035	450,937
Tasmania	212,910	209,392	262,209	256,425	413,303	410,289	677,806	668,585
Queensland	261,284	258,164	764,182	752,772	1,255,576	1,200,667	1,029,181	1,010,651
New Zealand	538,558	498,521	834,547	783,050	819,716	719,351	1,032,700	954,443
Cape of Good Hope ..	369,139	314,063	746,335	600,956	1,609,420	1,376,905	1,611,664	1,333,056
North America :								
Canada								
New Brunswick ..								
Nova Scotia								
Prince Edward Is.								
British Columbia								
Vancouver Island								
Newfoundland ..	320,506	307,721	456,503	440,094	599,934	553,549	590,771	574,659
West Indies :								
Bahamas	159,708	46,571	142,419	81,204	174,419	47,843	227,249	62,314
Turk's Island	53,621	27,877	129,596	31,925	132,740	37,120	263,776	59,424
Jamaica	428,418	299,786	766,378	568,851	796,946	648,497	945,281	735,436
Virgin Islands	13,331	10,282	8,530	7,415	5,934	5,889	12,046	11,800
St. Christopher ..	66,242	53,934	64,502	46,147	253,394	227,583	387,901	366,538
Nevis	23,045	19,675	14,330	9,899	19,030	13,775		
Antigua	50,205	45,177	60,577	50,913	256,023	234,956	388,467	367,341
Montserrat	14,343	13,759	15,818	14,508	13,484	11,366	217,620	215,941
Dominica	19,160	16,729	24,748	21,725	22,264	16,334	273,446	270,164
St. Lucia	29,035	24,569	45,637	34,276	232,828	190,034	431,073	375,645
St. Vincent	42,534	35,379	48,096	42,688	118,433	112,362	184,056	171,866
Barbados	278,517	195,496	409,176	305,988	508,082	422,100	914,687	812,225
Grenada	36,101	26,584	163,654	159,254	144,745	136,613	246,444	243,121
Tobago	13,174	13,174	17,634	17,236	14,504	14,504	102,043	100,735
Trinidad	202,807	102,717	226,160	216,715	877,611	619,163	1,069,121	725,250

220

2

**TOTAL TONNAGE OF VESSELS (a) ALL COUNTRIES AND (b) BRITISH, ENTERED
AND CLEARED (exclusive of Coasting Trade).**

T.C.B.	POSSESSIONS	(a)	(b)	(a)	(b)	(a)	(b)
		1890	1890	1895	1895	1900	1900
	British India	6,983,332	6,764,677	8,226,600	7,027,569	8,269,430	6,803,225
	Ceylon	5,117,902	4,314,622	6,543,197	5,590,179	8,487,940	6,096,728
	Hong Kong	9,771,741	6,994,919	11,525,586	8,589,637	14,022,167	9,155,198
	Australia :						
	New South Wales ..	4,761,872	4,156,063	5,860,038	5,215,174	8,014,889	6,846,492
	Victoria	4,363,341	3,808,765	4,348,686	3,889,466	5,873,581	5,127,020
	South Australia, except Northern Territory ..	2,190,442	1,744,703	2,979,643	2,481,469	3,552,636	2,929,487
	Northern Territory ..	164,264	164,264	171,090	171,090	143,135	138,823
	Western Australia ..	904,861	773,461	1,578,553	1,406,185	3,232,028	2,538,570
	Tasmania	951,247	940,582	937,525	932,769	1,232,918	1,218,885
	Queensland	910,779	891,404	971,905	944,744	1,655,017	1,405,363
	Cape of Good Hope ..	2,957,377	2,589,127	3,880,076	3,502,444	9,504,992	8,538,713
	North America :						
	Dominion of Canada ..	10,328,285	5,325,952	10,976,829	6,048,248	14,175,121	8,647,119
	Newfoundland	634,147	590,006	785,381	763,735	1,147,481	1,139,670
	West Indies :						
	Bahamas	270,874	41,951	396,620	158,182	1,113,866	513,244
	Turk's Island	215,428	71,610	240,124	41,160	290,639	69,534
	Jamaica	1,230,506	850,710	1,607,347	1,125,507	1,742,224	937,216
	Virgin Islands	8,902	8,187	16,534	15,579	12,076	10,954
	St. Christopher						
	Nevis	488,262	440,930	478,132	447,475	523,213	487,075
	Antigua	469,847	426,609	467,978	447,632	451,592	439,062
	Montserrat	256,760	253,026	372,471	371,291	198,730	192,125
	Dominica	342,817	327,479	390,954	388,441	467,686	448,728
	St. Lucia	878,316	747,173	947,668	802,165	1,841,595	1,518,174
	St. Vincent	300,222	287,496	237,910	230,474	289,712	278,029
	Barbados	1,246,262	1,070,433	1,169,901	1,072,750	1,361,466	1,245,205
	Grenada	287,438	278,906	510,154	501,805	439,009	427,873
	Trinidad	1,276,870	713,924	1,250,088	790,886		
	Tobago	69,237	69,237	41,767	41,767	1,178,494	642,689

221

R 2

**TOTAL TONNAGE OF VESSELS (a) ALL COUNTRIES AND (b) BRITISH, ENTERED
AND CLEARED (exclusive of Coasting Trade).**

POSSESSIONS	(a)	(b)	(a)	(b)	(a)	(b)
	1905	1905	1910	1910	1915	1915
India	12,598,321	10,333,636	14,993,701	12,163,288	12,152,302	10,152,155
Ceylon	11,157,925	8,236,771	14,769,208	9,670,570	10,524,897	7,574,122
Hong Kong	19,778,176	13,226,346	20,966,504	12,112,019	19,561,318	11,381,439
Commonwealth of Australia	7,444,417	5,545,362	9,333,146	6,989,854	8,599,258	7,086,615
Dominion of New Zealand	2,280,962	1,928,860	2,756,238	2,672,028	3,277,358	3,161,162
Cape of Good Hope ..	8,867,839	7,602,223	—	—	—	—
North America :						
Dominion of Canada ..	15,588,455	10,304,486	22,297,186	16,054,335	24,827,650	16,312,675
Newfoundland	1,812,637	1,085,506	2,099,698	1,259,392	1,962,342	1,448,097
West Indies :						
Bahamas	1,251,379	148,865	1,722,340	230,724	682,264	31,517
Turk's Island	332,254	90,617	385,763	105,018	361,396	28,344
Jamaica	2,791,448	1,179,987	3,823,931	1,745,370	2,556,409	763,287
Windward Islands :						
St. Lucia	1,829,563	1,510,660	2,792,359	2,305,440	2,392,472	1,674,998
St. Vincent	470,519	405,524	290,917	274,257	332,211	328,178
Barbados	1,700,787	1,594,987	3,395,080	2,552,216	3,384,547	2,324,344
Grenada	639,298	637,046	590,451	586,495	850,822	840,266
Leeward Islands	2,172,472	2,123,448	2,338,322	2,153,227	2,514,836	2,456,233
Trinidad and Tobago	1,973,121	1,356,178	2,771,364	1,657,951	2,584,130	1,939,113

•
**TOTAL TONNAGE OF VESSELS (a) ALL COUNTRIES AND (b) BRITISH, ENTERED
 AND CLEARED (exclusive of Coasting Trade).**

POSSESSIONS	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
	1916	1916	1917	1917	1918	1918	1919	1919
India	11,954,963	9,601,880	10,867,863	7,607,554	10,537,405	7,405,781	12,999,992	10,837,731
Ceylon	9,146,936	6,916,429	6,153,778	4,621,345	6,607,565	4,975,698	9,533,859	13,131,162 ¹
Hong Kong ..	19,106,840	10,995,794	17,341,929	9,157,585	13,985,040	7,072,021	18,475,293	10,095,805
Commonwealth of								
Australia ..	8,538,322	6,981,148	7,694,442	6,272,950	5,031,750	3,777,819	6,180,486	4,876,642
Dom. of New Zealand ..	2,940,110	2,815,083	2,787,658	2,667,954	2,590,175	2,461,915	2,986,139	2,825,738
Union of South Africa ..	11,699,155	9,099,709	9,911,510	8,024,546	5,975,943	4,269,282	7,233,033	6,056,623
North America :								
Dominion of Canada ..	29,267,074	20,488,321	32,787,127	21,303,643	25,261,393	17,812,694	25,244,754	16,755,628
Newfoundland ..	2,083,629	1,337,947	2,191,006	1,818,016	1,783,970	1,408,518	1,711,668	1,315,704
West Indies :								
Bahamas	750,573	35,087	550,551	44,984	203,955	35,059	159,320	33,098
Turk's Island ..	419,764	27,224	433,917	34,485	372,608	24,016	378,204	38,872
Jamaica	2,439,378	885,311	2,064,933	871,576	1,177,025	318,247	2,084,942	801,791
Windward Islands :								
St. Lucia	2,376,492	1,716,618	1,712,014	1,145,055	1,319,836	952,526	1,219,397	875,645
St. Vincent	340,921	340,392	335,931	335,678	211,917	211,427	313,599	313,216
Barbados	3,008,322	1,840,501	2,588,944	1,375,380	2,101,359	1,037,950	3,648,359	1,650,526
Grenada	723,107	716,819	750,781	749,049	520,525	515,779	734,114	725,397
Leeward Islands ..	2,102,955	2,031,998	2,135,609	2,104,394	1,433,502	1,417,233	1,782,926	1,758,391
Trinidad and Tobago	2,127,225	1,482,820	1,868,169	1,299,561	1,452,869	1,115,535	2,255,584	1,528,966

¹Including tonnage of vessels calling to coal.

INDEX

- Aaron Manby, 33.
 Aberdeen, 47.
 Acadia, 37.
 Adelaide, 44.
 Aglaia, 33.
 Ailly, Cardinal Peter d', 7.
 Alaska, 18.
 Allan Line, 49.
 Amboyna, Massacre of, 11.
 American Line, 117, 118.
 Arctic, 39.
 Armenia, 2.
 Asia, Trade between Europe and, 1-5.
 Astrolabe, 7, 61.
 Atlantic—cable, 66; coast route abandoned for ocean route, 58; crossed by Columbus, 9; first crossed by steamships, 34, 36; sea routes, 68.
 Atlantic Transport Company, 117, 118.
 Australia, 43; mail services to, 43; reached by Cook, 15, 16, 18; sea routes to, 71.
 Australian Royal Mail Steam Navigation Co., 44.

 Bacon, Roger, 7.
 Ballin, Albert, 114, 115.
 Bank notes, 133.
 Banking system, 132-134; need for an Empire bank, 192.
 Behaim, Martin, 61.
 Bills of Exchange, 125, 126, 130, 131.
 Bismarck, 107, 111-113.
 Bosphorus, 3.
 Botany Bay, 15.
 Brazil, discovery of, 8.
 Brindley, James, 92.
 Britannia, 37.
 British & North American Royal Mail Co., 27.
 British Empire, area and population, 155, 156; can it be self-supporting? 156-160; colonial policy, 152-154; Empire sources of raw materials, 159-169.
 Brunel, I. K., 28, 44, 45.

 Cable, effect of on markets, 66, 187.
 Cabot, John and Sebastian, 8.
 Cabral, 8.
 Cairngowan, 50.
 Cairnross, 50.
 Caledonia, 37.
 Calicut, 6.
 Canada, ceded to Britain by France, 59; sea routes to, 69.
 Canals in England, 92, 93.
 Canary Islands, 7.
 Cape of Good Hope, 5, 58.
Carmantia, 49.
 Central America discovered, 8.
 Ceylon, 58.
Challenger, 25.
 Chancellor, Sir R., 8.
Charlotte Dundas, 32.
 Chronometer, 7, 62.
Clermont, 32, 33.
 Climate, effect of on industry, 172.
 Clippers, 23-25, 36, 37.
 Coal, 99; as a source of cheap power, 182; influence of, 51, 52; its use in ships, 53; supply, 166-168.
Cobra, 49.
 Collins line of steamships, 38, 39.
 Colonial policy, 153.
Columbia, 37.
 Columbus, 7, 8, 9, 60.
Comet, 32.
 Commercial crisis of 1857, 65.
 Commercial development. effects

- of science and invention on, 63-68; effects of finance and exchange on, 121; effect of industry on, 92-120.
- Commercial law, unification of, 136, 137.
 - Commercial policy, 57.
 - Compass, 6, 27, 60, 61.
 - Constantinople, 3, 4.
 - Cook, James, 12-19, 59.
 - Copenhagen, 4.
 - Cotton and cotton industries, 96, 104, 105, 160-162.
 - Cunard Company, 37, 38, 48, 49.
 - Cutti Sarkh*, 25.
- Dalton, John, 60.
- Dampier, 15.
- Delo*, 54.
- Deutschland*, 48.
- Diesel, Dr., 46.
- Diesel engine, 30, 54.
- Dowman, Captain, 25.
- Dublin & London Steam Packet Co., 41.
- Dutch, and Indian trade, 9, 11; seize East India Co. ships, 57; shipping supremacy in Far East, 58.
- East India Company, 9, 10, 11, 23, 57.
- Eastern Steam Navigation Co., 44.
- Eaveslone*, 54, 55.
- Egypt as part of Turkish Empire, 79.
- Elder, John, 45, 46.
- Engel, 157.
- England. *See* United Kingdom.
- Enterprise*, 39.
- Exchange, theory of, 121-130; post-war conditions, 190-192.
- Exports, table showing total value of, 215-218.
- Falcon*, 39, 40.
- Finance, effect of on commerce, 121.
- Fitch, Ralph, 10.
- Food supply of British Empire, 157-159.
- Foreign trade policy, 57.
- Frankfort, Treaty of, 107.
- Free ports, 112.
- Free Trade, 112; in Germany, 110, 111.
- Free Trader*, 22.
- French revolution, 97.
- Fuel supply within the Empire, 166-169.
- Gama, Vasco da, 5, 6, 9, 60.
- Garry Owen*, 28.
- George III., 59.
- Georgia, Island of, 17.
- Germany, banking, 133, 134; free trade, 110, 111; German Empire established, 107-109; industrial position in nineteenth century, 109-113; shipping, 113-118, 183.
- Glasgow, 32.
- Godfrey, of Philadelphia, 61.
- Gold Standard, 127, 128, 190.
- Goldsmiths, 132, 133.
- Gorgas, William C., 86.
- Gosnold, Captain, 58.
- Great Britain*, 28, 38, 39.
- Great Eastern*, 28, 44-46.
- Great Liverpool*, 42.
- Great Western*, 35-37.
- Great Western Steamship Co., 38.
- Green, Richard, 23.
- Hadley, George, 60.
- Hadley, John, 61.
- Hamburg, 109, 111, 112.
- Hamburg-Amerika Linie, 115, 117.
- Hanse League, 3, 4, 8.
- Harrison, John, 62.
- Henry VII., 8.
- Henry the Navigator, 5.
- Herring industry, 9.
- Himalaya*, 43.
- Houtman, Cornelius, 10.
- Hunnish invasion of Europe, 2.
- Iberia*, 41.
- Imperator*, 50.
- Imports, table showing total value of, 211-214.

- India, first steamships to, 39 ;
 mails to, 41 ; Da Gama's
 route to, 6 ; old trade route
 from, 2 ; opening up of trade
 with, 9-12.
- Indiaman*, 22.
- Indian Ocean, 6 ; crossed by
 Da Gama, 9.
- Industrial conditions of the
 world to-day, 174-193.
- Industrial revolution, 93-97, 171.
- Industry, effect of on commerce,
 92-120 ; effect of climate on,
 172.
- Invention, benefits of, 56 ;
 effects of on commercial devel-
 opments, 57-68 ; industrial,
 96, 174.
- Issus, 2.
- Ivan the Terrible, 8.
- Jewish mediæval financiers, 124-
 126.
- Kaiser Wilhelm II.*, 48.
- Kelvin, Lord, 28, 61.
- King Edward*, 49.
- Kitchener, Lord, 179.
- La France*, 30.
- Laird's of Birkenhead, 28.
- Lancaster, Capt. James, 10.
- League of nations, 190.
- Leander*, 25.
- Leedes, William, 10.
- Lesseps, Ferdinand de, 19, 78,
 79, 84.
- Levant Ports, 3, 4.
- Leyland Line, 117, 118.
- Lindsay, Shaw, 23.
- Lloyd, Edward, 138, 139.
- Lloyd line of steamships, 117.
- Lloyd's and Lloyd's register of
 shipping, 137-150.
- Lord of the Isles*, 25.
- Lusitania*, 49.
- Machin or Macham, 6, 7.
- Madeira, Island of, 6, 7.
- Magoon, Charles E., 86.
- Mail services, Atlantic, 36-38 ;
 Australia, 43 ; India, 39-43.
- Malabar, Rajah of, 9.
- Malaria, 86.
- Manby, Aaron, 33.
- Marine boilers, 26, 51.
- Marine engines, 30, 45-50, 54, 55.
- Markets, development of modern
 66, 184-189.
- Mathematical jewel, 61.
- Maudslay, Son, and Field, 36.
- Mauritania*, 47, 49.
- Mediterranean, 1, 9, 19.
- Metal supply within Empire,
 163-166.
- Mill, John Stuart, 110.
- Mint, The, 132.
- Money, 123-134.
- Monsoon, 6.
- Morgan, Pierpont, 114, 115,
 117-119.
- Nautical instruments, 60-62.
- Navigation laws, 24.
- Nelson, 84.
- New South Wales, 15.
- New Zealand reached by Cook,
 14, 16, 18 ; sea routes to, 71,
 74.
- Newbery, John, 10.
- Newton, Sir Isaac, 61.
- North American coast, 8.
- North-west passage, 17, 18.
- Nova Scotia discovered, 8.
- Oil fuel, 168 ; in ships, 53-55, 147.
- Oriental*, 42.
- Oriental trade, 9.
- Pacific*, 39.
- Panama Canal, 19, 24, 77, 84-91,
 106, 167 ; effect of on voyages
 from London and New York,
 208.
- Parsons, Sir Charles, 46, 48.
- Peninsular & Oriental Co., 41.
- Peninsular Steam Navigation
 Co., 41-43.
- Phœnicia, 3.
- Phœnicians, 1.
- Polo, Marco, 60.
- Portuguese—and Indian trade,
 9, 10, 11 ; trade expansion, 5.
- Price, Dr.

Prince Albert, 33.
Production, 176, 177.

- Quadrant, 61.
- Quebec, 13.

Raleigh, Sir Walter, 58.
Raw materials of industry, 159-160.

Red Sea trade route, 3.
Red Star Line, 117, 118.
Restriction of output, 174, 175.
Roads in England, 92, 93.
Romance nations, 2.
Ross, Ronald, 85, 86.
Routes. *See* Sea routes, Trade routes.
Royal Exchange, 124.
Royal Tar, 41.
Royal William, 35.
Russell, Scott, 28, 45.
Russia, trade between England and, 8.

Sailing ships, 23-30; trading methods of, 63.

Salisbury, 54, 55.
Sandwich Islands, 18.
Savannah, 34, 35.
Sawgin, 96.
Science, effects of on commercial development, 57-68.
• Screw propeller, 33, 38.
Sea routes, 68-75; coast routes abandoned for ocean routes, 58. *See also* Trade routes.
Self-government policy of British, 152.

Sextant, 7, 61, 62.
Shipping—Atlantic first crossed by steamships, 34-36; attempt to reach India by steamship, 39; British, German and American competition, 113-120; competition in nineteenth century, 23, 38, 134-136; development of modern markets, 63, 67, 184-186; Dutch supremacy in Far East, 58; effect of coal carrying on British shipping and freights, 52, 166, 167;

effect of Suez and Panama Canals, 77-84, 89, 208; English at low ebb beginning seventeenth century, 58; English navigators abandon coast routes for ocean routes, 59; English shipping in early times, 4; English ships in every known sea by 1700, 59; English supremacy, 20; free ports, 112; insurance, 185; insurance and registration at Lloyd's, 137-150; mail services, 36-43; post-war conditions, 183, 184; routes, 68-75; shipping areas, 77; some important dates, 194-207; statistics re tonnage, motive power, etc., 21, 75, 144-150, 209, 219.

Ships—evolution of sailing ship, 23-30; evolution of steamship, 31-56; first passenger steamers, 32; Indiaman and Free Trader, 22; iron and steel ships, 26-30; first iron steamer, 33; marine boilers, 26, 51; marine engines, 30, 45-50, 54, 55; nautical instruments, 60-62; oil and coal fuel, 53-55; screw propeller, 33, 38; wood and iron ships, 25.

Sirius, 35-37.

Sobraon, 25.

Society Islands, 14.

Spanish Armada, 10.

Stephens, Thomas, 10.

Story, James, 10.

Suez Canal, 19, 42, 77-84.

Surat, 11.

Swally, sea fight off, 11.

Symington, William, 32.

Tahiti, 14.

Taitzing, 25.

Tariff policy, 110, 111, 112, 176.

Tasman, 14.

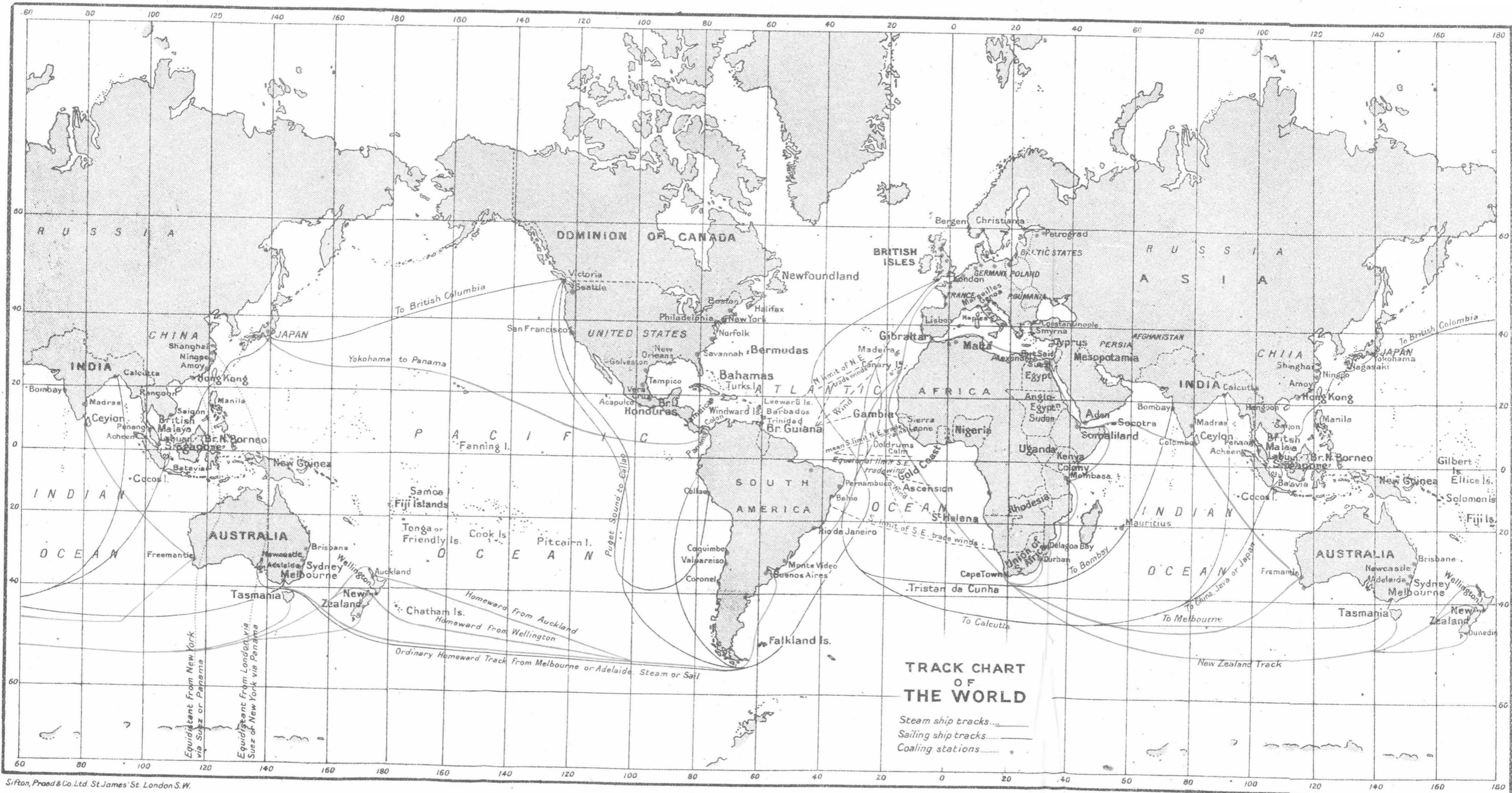
Taylor, 27, 61.

Thermopylae, 25.

Toiler, 54.

Tollgates, 92.

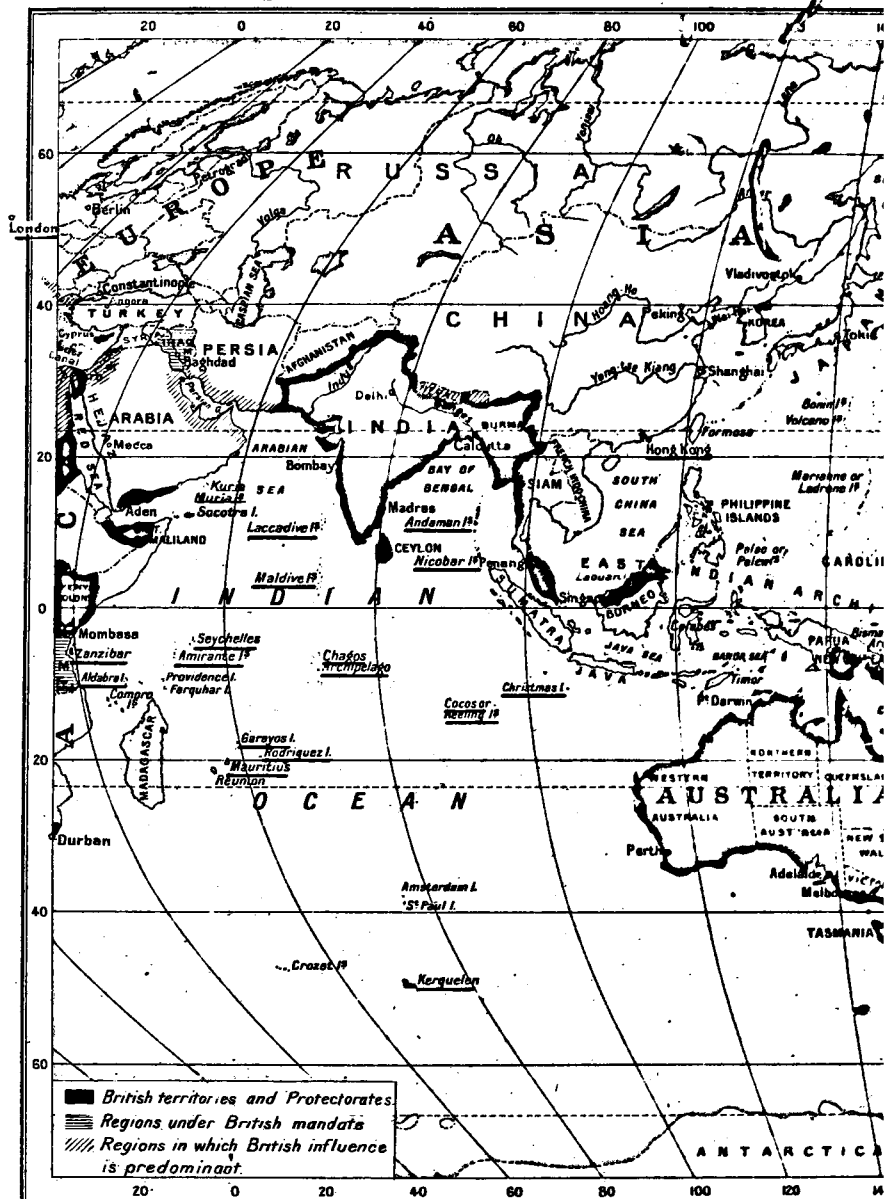
- Towns, growth of, caused by industrial revolution, 95, 96.
- Tracks. *See* Sea routes.
- Trade routes, 58, 68-75; discoveries of early sixteenth century navigators, 8; new route to India discovered by Da Gama, 5, 6; opening out of world routes, 1-19; opening up of trade with India, 9-12; routes between Europe and Asia, 1-5; Suez and Panama Canals, 19; work of James Cook, 12-19.
- Trade unions, 179, 180.
- Trebizond, 2, 3.
- Trial*, 26.
- Turbine engine, 48-50.
- Turbinia*, 48.
- Turk in Near East, 4, 5.
- Tweed*, 29.
- Unemployment, 174, 175, 180.
- United East India Co., 10.
- United Kingdom—commercial policy, 11; dependent on shipping for food supply, 20; effect of climate on industry, 172; foreign competition, 113; industrial position in nineteenth century, 98-101; industrial position from 1914, 177-184; industrial revolution and its effects, 93-97, 171; inland transportation to eighteenth century, 92-94; manufacturers oust agriculture, 51, 52, 99; self-supporting until end of eighteenth century, 171.
- United States—American railways and commercial crisis of 1857, 65; development of railways and industries, 101-104; independence, 59, 97; industrial position in eighteenth century, 97, 98; proposed amalgamation of shipping and railway companies, 119; shipping and ship building, 23-25, 31-34, 38, 39, 105, 106, 114, 116, 117, 118.
- Vancouver Island, 18.
- Venetians, 1, 3, 4.
- Vespaston*, 50.
- Victoria*, 44.
- Victorian*, 49.
- Viper*, 49.
- Virginian*, 49.
- Vulcan*, 26.
- Wages, 177.
- Wandel*, 54.
- Watt, James, 32, 93.
- West India and Pacific Line, 117, 118.
- West Indies discovered, 8.
- Whitney, Eli, 96.
- Wilkinson, John, 26.
- Wool supply within Empire, 162.
- Yellow Jack, 85, 86.



TRACK CHART OF THE WORLD

Steam ship tracks.....
 Sailing ship tracks.....
 Coaling stations.....

CHECKED
80-3-04



SUTTON PRAED & CO. LTD. ST. JAMES'S ST. LONDON S.W.

International Boundaries

